POWERS ELEVATION

OIL WELL ELEVATIONS — LOCATIONS
ENVIRONMENTAL — ARCHAEOLOGICAL SERVICES
600 SOUTH CHERRY STREET, SUITE 1201
DENVER, COLORADO 80222
PHONE NO. 303/321-2217

June 30, 1982

State of Utah
Division of Oil, Gas, and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RE: Filing Application for Permit to Drill
Raymond T. Duncan
#1-23 Bradford Canyon Federal
NE SW Sec. 23 T37S R24E
1990' FAL & 1600' FWL
San Juan County, Utah

Gentlemen:

Enclosed are three copies each of the Federal A.P.D. Form 9-331C, the Location and Elevation Plat, the Ten-Point Compliance Program, and the Blowout Preventer Diagram for the above-referenced well location.

Please return the approved copies to:

Mr. John Lowry
Raymond T. Duncan
1777 South Harrison Street
Penthouse One
Denver, Colorado 80210

Very truly yours,

POWERS ELEVATION

Connie L. Frailey

Connie L. Frailey
Vice President, Environmental Services

CLF/sfh
Enclosure

cc: John Lowry

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [XX] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [XX] GAS WELL [ ] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Raymond T. Duncan

3. ADDRESS OF OPERATOR: 1777 South Harrison Street, Penthouse One, Denver, Colorado 80210

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1990' FSL & 1600' FWL (NE SW)
At proposed prod. zone: Same

5. LEASE DESIGNATION AND SERIAL NO.: U-12942

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

7. UNIT AGREEMENT NAME: ~~Bradford Canyon Fed. Unit~~

8. FARM OR LEASE NAME: Bradford Canyon Federal

9. WELL NO.: 1-23

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 23 T37S R24E

12. COUNTY OR PARISH: San Juan

13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
The location is 16.8 miles north of Hatch Trading Post, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 1600'

16. NO. OF ACRES IN LEASE: 640

17. NO. OF ACRES ASSIGNED TO THIS WELL: 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: ----

19. PROPOSED DEPTH: 5560' Chimney Rock

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5011' GR

22. APPROX. DATE WORK WILL START*: July 15, 1982

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" New	48# K-55 ST&C	80'	Cement to surface
12 1/4"	8 5/8" New	24# K-55 ST&C	2200'	1000 sacks Cement Class "G"
7 7/8"	5 1/2" New	14# 15.5# K-55 LT&C	5560'	300 sacks cement Class "G"

1. Drill 17 1/2" hole and set 13 3/8" conductor pipe to 80' interval and cement in place.
2. Drill 12 1/4" hole and set 8 5/8" surface casing to 2200' with good returns.
3. Log B.O.P. checks in daily drill reports and drill 7 7/8" hole to 5560'.
4. Run tests if warranted and run 5 1/2" casing if productive.
5. Run logs, as needed, and perforate and stimulate as needed.

EXHIBITS ATTACHED:

"A"	Location and Elevation Plat	"G" & "G_1"	Drill Pad Layout, Production Facilities & Cut-Fill Cross-Section
"B"	The Ten-Point Compliance Program		
"C"	The Blowout Preventer Diagram		
"D"	The Multi-Point Requirements for A.P.D.	"H"	Drill Rig Layout
"E" & "E_1"	Access Road Maps to Location		
"F"	Radius Map of Field		

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED W. L. Falkin TITLE Chief Engr DATE 6/3/82

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

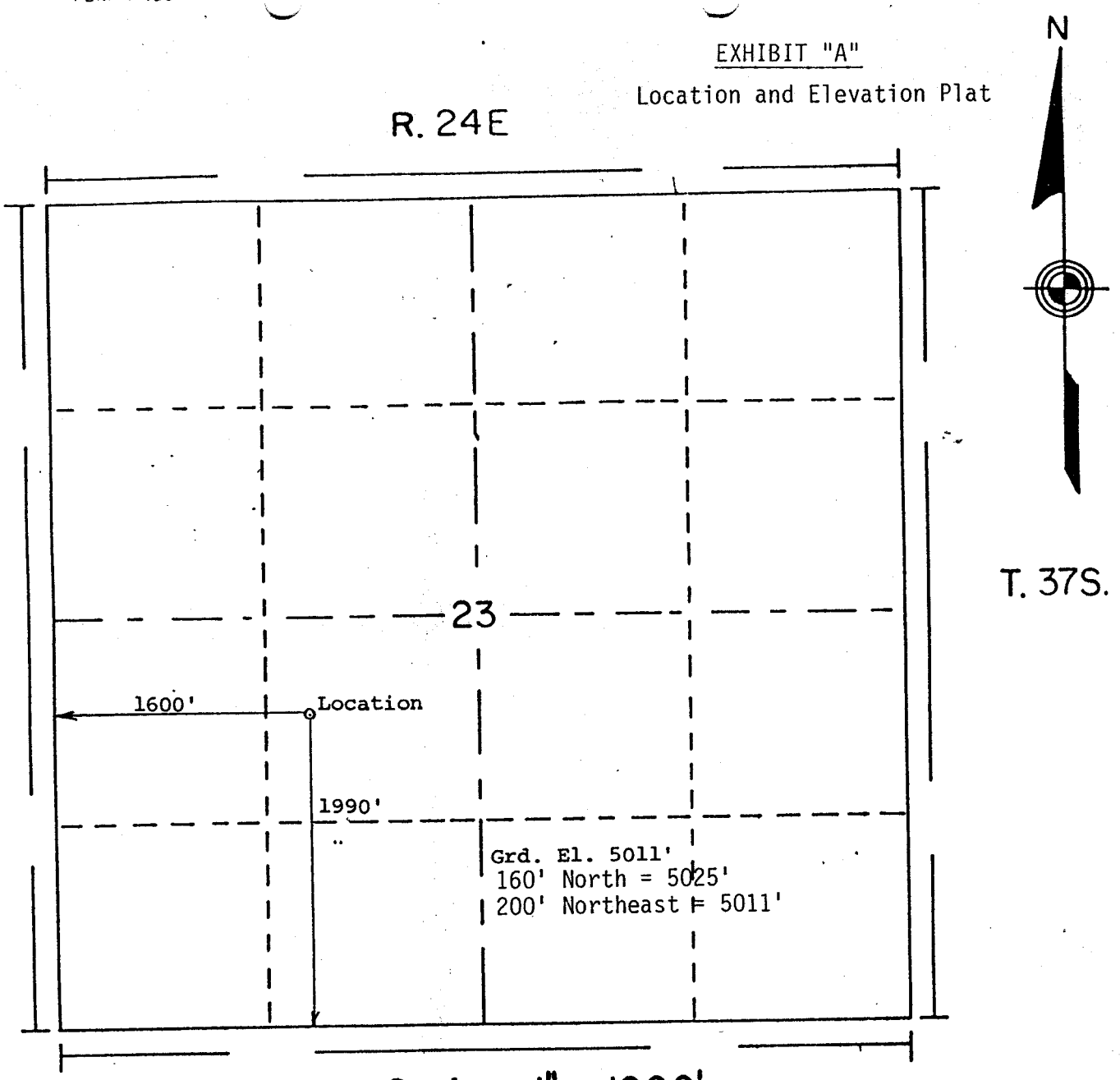
APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 6/20/82
BY: [signature]

*See Instructions On Reverse Side

FORM F-106

EXHIBIT "A"

Location and Elevation Plat



Scale··· 1" = 1000'

Powers Elevation of Denver, Colorado has in accordance with a request from John Lowry for Raymond T. Duncan determined the location of #1-23 Bradford Canyon Federal to be 1990'FSL & 1600'FWL Section 23 Township 37 South Range 24 East Salt Lake Meridian San Juan County, Utah

I hereby certify that this plat is an accurate representation of a correct survey showing the location of

Date: 25 June '82

T Nelson

Licensed Land Surveyor No. 2711
State of Utah

EXHIBIT "B"

TEN-POINT COMPLIANCE PROGRAM

OF NTL-6 APPROVAL OF OPERATIONS

Attached to Form 9-331C
Raymond T. Duncan
#1-23 Bradford Canyon Federal
NE SW Sec. 23 T37S R24E
1990' FSL & 1600' FWL
San Juan County, Utah

1. The Geologic Surface Formation

The surface formation is the Quaternary Alluvium.

2. Estimated Tops of Important Geologic Markers

Entrada	360'
Carmel	510'
Navajo	550'
Kayenta	920'
Windgate	1070'
Shinarump	2110'
Moekopi	2240'
Cutler	2270'
Hermosa	4050'
Upper Ismay	5157'
Lower Ismay	5342'
Gothic Shale	5392'
Desert Creek	5362'
Chimney Rock	5442'
Total Depth	5560'

3. Estimated Depths of Anticipated Water, Oil, Gas or Minerals

Desert Creek	5362'	Oil/gas

Water is intermittent to 2120' (per Mr. Raffoual of Salt Lake City, MMS) through Entrada, Navajo and Windgate.

4. The Proposed Casing Program

HOLE SIZE	INTERVAL	SECTION LENGTH	SIZE (OD)	WEIGHT, GRADE & JOINT	NEW OR USED
17 1/2"	0-80'	80'	13 3/8"	48# K-55 ST&C	New
12 1/4"	0-2200'	2200'	8 5/8"	24# K-55 ST&C	New
7 7/8"	0-4400'	4400'	5 1/2"	14# K-55 LT&C	New
7 7/8"	4400'-5560'	1160'	5 1/2"	15.5 K-55 LT&C	New

Cement Program -

Conductor Pipe: Cement to surface.

Surface Casing: 1000 sacks cement, Class "G" + additives.

Production Casing: 300 sacks cement, Class "G" + additives.

5. The Operator's Minimum Specifications for Pressure Control

EXHIBIT "C" is a schematic diagram of the blowout preventer equipment. The BOP's will be hydraulically tested to half of working pressure after nippling up and after any use under pressure. Pipe rams will be operationally checked each 24-hour period, as will blind rams and annular preventer each time pipe is pulled out of the hole. Such checks of BOP will be noted on daily drilling reports.

Accessories to BOP will include an upper kelly cock, floor safety valve, drill string BOP and choke manifold with pressure rating equivalent to the BOP stack.

6. The Type and Characteristics of the Proposed Circulating Muds

Mud system will be gel-chemical with adequate stocks of sorptive agents on site to handle possible spills of fuel and oil on the surface. Heavier muds will be on location to be added if pressure requires.

DEPTH	TYPE	WEIGHT #/gal.	VISCOSITY-sec./qt.	FLUID LOSS cc
0-4100'	Natural and Chemical Gel	9.2	35	10-20
4100'-T.D.	Chemical Gel	9.5 (enough to handle any abnormal pressure in Deseert Creek)	45	10

7. The Auxiliary Equipment to be Used

(a) An upper kelly cock will be kept in the string.

(b) A float will not be used at the bit.

(c) A mud logging unit will be monitoring the system.

(d) A stabbing valve will be on the floor to be stabbed into the drill pipe when kelly is not in the string.

8. The Testing, Logging and Coring Programs to be Followed

(a) Two Drill Stem Tests will be run: one in the Ismay and one in the Desert Creek.

(b) The logging program will consist of the following:

Dual Induction	Surface casing to T.D.
BHC Acoustic	Surface casing to T.D.
BHC Density	2200' to T.D.

(c) One core is anticipated in the Ismay formation.

(d) Completion program will be acid treatment with possible acid frac. Appropriate Sundry Notice will be submitted for approval.

9. Any Anticipated Abnormal Pressures or Temperatures

It is possible abnormal pressures may be encountered in the Desert Creek formation. No other abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well. Bottom hole pressure expected is 3500 psi.

No hydrogen sulfide or other hazardous fluids or gases have been found, reported or known to exist at these depths in the area.

10. Anticipated Starting Date and Duration of the Operations

The anticipated starting date is set for July 15, 1982, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 45 days after spudding the well and drilling to casing point.

** FILE NOTATIONS **

DATE: July 7, 1982

OPERATOR: Raymond T. Duncan

WELL NO: Bradford Canyon Federal [redacted] #1-23

Location: NESW Sec. 23 T. 37S R. 24E County: San Juan

File Prepared: ☑ Entered on N.I.D: ☐

Card Indexed: ☐ Completion Sheet: ☐

API Number 43-037-30799

CHECKED BY:

Petroleum Engineer: C-3(c) Approval Conditional upon submittal of topographic exception information

Director:

Administrative Aide:

APPROVAL LETTER:

Bond Required: ☑ OK Survey Plat Required: ☐

Order No. ____ O.K. Rule C-3 ☐

Rule C-3(c), Topographic Exception - company owns or controls acreage within a 660' radius of proposed site ☐

Lease Designation Fed. Plotted on Map ☑

Approval Letter Written ☐

Hot Line ☑ P.I. ☑

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

OIL & GAS OPERATIONS
RECEIVED
JUL 14 1982
SALT LAKE CITY, UTAH

5. LEASE DESIGNATION AND SERIAL NO.: U-12942

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

1a. TYPE OF WORK: DRILL [XX] DEEPEN [ ] PLUG BACK [ ]

7. UNIT AGREEMENT NAME: Bradford Canyon Fed. Unit

b. TYPE OF WELL: OIL WELL [XX] GAS WELL [ ] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Bradford Canyon Federal

2. NAME OF OPERATOR: Raymond T. Duncan

9. WELL NO.: 1-23

3. ADDRESS OF OPERATOR: 1777 South Harrison Street, Penthouse One, Denver, Colorado 80210

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1990' FSL & 1600' FWL (NE SW)
At proposed prod. zone: Same

DIVISION OF OIL, GAS & MINING

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 23 T37S R24E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: The location is 16.8 miles north of Hatch Trading Post, Utah

12. COUNTY OR PARISH: San Juan — 13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	1600'	16. NO. OF ACRES IN LEASE: 640	17. NO. OF ACRES ASSIGNED TO THIS WELL: 160
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	----	19. PROPOSED DEPTH: 5560'	20. ROTARY OR CABLE TOOLS: Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5011' GR			22. APPROX. DATE WORK WILL START*: July 15, 1982

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" New	48# K-55 ST&C	80'	Cement to surface
12 1/4"	8 5/8" New	24# K-55 ST&C	2200'	1000 sacks Cement Class "G"
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EXHIBITS ATTACHED:

"A"	Location and Elevation Plat	"G" & "G_1"	Drill Pad Layout, Production Facilities & Cut-Fill Cross-Section
"B"	The Ten-Point Compliance Program		
"C"	The Blowout Preventer Diagram		
"D"	The Multi-Point Requirements for A.P.D.	"H"	Drill Rig Layout
"E" & "E_1"	Access Road Maps to Location		
"F"	Radius Map of Field		

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED W L Fallin TITLE Chief Engr DATE 6/3/82

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY W P Martens FOR E. W. GUYNN TITLE DISTRICT OIL & GAS SUPERVISOR DATE JUL 13 1982

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED
TO OPERATOR'S COPY

NOTICE OF APPROVAL

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

*See Instructions On Reverse Side

State of G

Identification No. 395-82

United States Department of the Interior
~~Geological Survey~~ MMS
2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104

JUL 12 1982
SALT LAKE CITY, UTAH

MINERALS MANAGEMENT SERVICE
OIL & GAS OPERATIONS
RECEIVED

NEPA CATEGORICAL EXCLUSION REVIEW

PROJECT IDENTIFICATION

Operator Raymond T. Duncan

Project Type single zone oil exploration zone

Project Location 1990'FSL/1600'FWL, sec. 23, T. 37S., R. 24E., San Juan County, UT

Well No. 1-23 Bradford Canyon Federal Lease No. U-12942

Date Project Submitted _____

FIELD INSPECTION Date June 24, 1982

Field Inspection Participants

John Lowry - agent for R.T. Duncan
J.A. Brodway - Brodway Drilling
Al Heaton - Urado Construction
Fred Frampton - archy, Powers Elevation
Gerald Huddleston/Carolin Wood - surveyor, Powers Elevation
Brian Wood/Tricia Powell - BLM
Don Englishman - MMS

I have reviewed the proposal in accordance with the categorical exclusion review guidelines. This proposal would not involve any significant effects and, therefore, does not represent an exception to the categorical exclusions.

June 24 1982
Date Prepared

Donald Englishman
Environmental Scientist

I concur

JUL 12 1982
Date

FOR E. W. GUYNN
DISTRICT OIL & GAS SUPERVISOR
District Supervisor

CATEGORICAL EXCLUSION REVIEW INFORMATION SOURCE

Criteria 516 DM 2.3.A	Federal/State Agency: Correspondence (date)	Federal/State Agency: Phone check (date)	Federal/State Agency: Meeting (date)	Local and private correspondence (date)	Previous NEPA	Other studies and reports	Staff expertise	Onsite inspection (date)	Other
1. Public health and safety						✓4	✓		(
2. Unique characteristics							✓		
3. Environmentally controversial							✓		
4. Uncertain and unknown risks							✓		
5. Establishes precedents							✓		
6. Cumulatively significant							✓		(
7. National Register historic places	✓1								
8. Endangered/ threatened species	✓1								
9. Violate Federal, State, local, tribal law						✓4	✓		

CATEGORICAL EXCLUSION REVIEW COMMON REFERENCE LEGEND

1. Surface Management Agency Input
2. Reviews Reports, or information received from Geological Survey (Conservation Division, Geological Division, Water Resource Division, Topographic Division)
3. Lease Stipulations/Terms
4. Application for Permit to Drill
5. Operator Correspondence
6. Field Observation
7. Private Rehabilitation Agreement

Remarks:

1. Location not changed as staked. Location is unorthodox due to topography and archaeology.
2. Water source not known at time of onsite.
3. Layden to SW - reserve pit on terrace above Montezuma Creek. Will be lined.
4. Archy will monitor all dirt construction for pad and road. Large ruin located on west side of location 90' from hole.

IN REPLY REFER TO

United States Department of the Interior

T37SR24E,S23
(U-069)

BUREAU OF LAND MANAGEMENT
Moab District
San Juan Resource Area
P.O. Box 7
Monticello, Utah 84535

July 2, 1982

Memorandum

To: Minerals Management Service, Salt Lake City

From: Area Manager, San Juan

Subject: Raymond T. Duncan's Bradford Canyon Federal #1-23 Well (U-12942)

We concur with the approval of the Application for Permit to Drill, provided the following amendments to the Surface Use Plan are included in the approval:

1. All construction will be monitored by a BLM-approved archaeologist.

2. Before the drill rig moves in:

   a. The existing spur road which will be bypassed by the new road construction will be blocked and ripped 6" deep.

   b. The road which leads to the archaeological site on the hill north of the well will be blocked.

   c. The road which goes down to the creek will be blocked at the top of the highest terrace.

3. If production results, all engines will be muffled due to the well's proximity to Three Kiva Ruin.

Robert Lurri

ACTING

cc: Durango, MMS

CONSERVE AMERICA'S ENERGY

Save Energy and You Serve America!

July 22, 1982

Raymond T. Duncan
1777 South Harrison Street
Penthouse One
Denver, Colorado 80210

RE: Well No. Bradford Canyon Federal #1-23
Sec. 23, T37S, R24E
San Juan County

Insofar as this office is concerned, approval to drill the above referred to oil well on said unorthodox location is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure. However, this approval is conditional upon submittal of topographic exception information sent to this office.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

CLEON B. FEIGHT
Office: 533-5771
Home: 466-4455

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (acquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-037-30799.

Sincerely,

RONALD J. FIRTH
CHIEF PETROLEUM ENGINEER

RJF:SC
cc: Minerals Management Service
Enclosure

NOTICE OF SPUD

Company: Raymond T. Duncan

Caller: D.A. Brown

Phone: 303-759-3303

Well Number: 1-23

Location: NE SW 23-32S-24E

County: La Plata State: Utah

Lease Number: U-11-17942

Lease Expiration Date: _____

Unit Name (If Applicable): _____

Date & Time Spudded: 1150 AM 7-24-92

Dry Hole Spudder/~~Rotary~~: _____

Details of Spud (Hole, Casing, Cement, etc.) _____

900' Auger

Rotary Rig Name & Number: Aztec #5

Approximate Date Rotary Moves In: _____

FOLLOW WITH SUNDRY NOTICE

Call Received By: DeLon

Date: 7-26-92

Phone # 303-759-3303

RJF

POWERS ELEVATION

OIL WELL ELEVATIONS — LOCATIONS
ENVIRONMENTAL — ARCHAEOLOGICAL SERVICES
600 SOUTH CHERRY STREET, SUITE 1201
DENVER, COLORADO 80222
PHONE NO. 303/321-2217

July 29, 1982

Mr. Ron Firth
State of Utah
Division of Oil, Gas, and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RE: Spacing Exception
Raymond T. Duncan
#1-23 Bradford Canyon Federal
NE SW Sec. 23 T37S R24E
1990' FSL & 1600' FWL
San Juan County, Utah

Dear Mr. Firth:

Per our conversation July 28, 1982, this letter constitutes a request for topographical exception due to the extreme terrain conditions. A topographic map is enclosed.

Raymond T. Duncan has control of a 660' radius as he holds the lease for all of Section 23 T37S R24E.

Minerals Management Service has given approval to the Bradford Canyon Federal Unit. Final approval is pending.

If anything further is requested, please advise.

Sincerely,

POWERS ELEVATION

Stephanie Haddock

Stephanie Haddock
Editor, Environmental Reports

SH/nt
Enclosure

cc: Mr. John Lowry, Raymond T. Duncan, 1777 South Harrison Street, Penthouse One, Denver, Colorado 80210

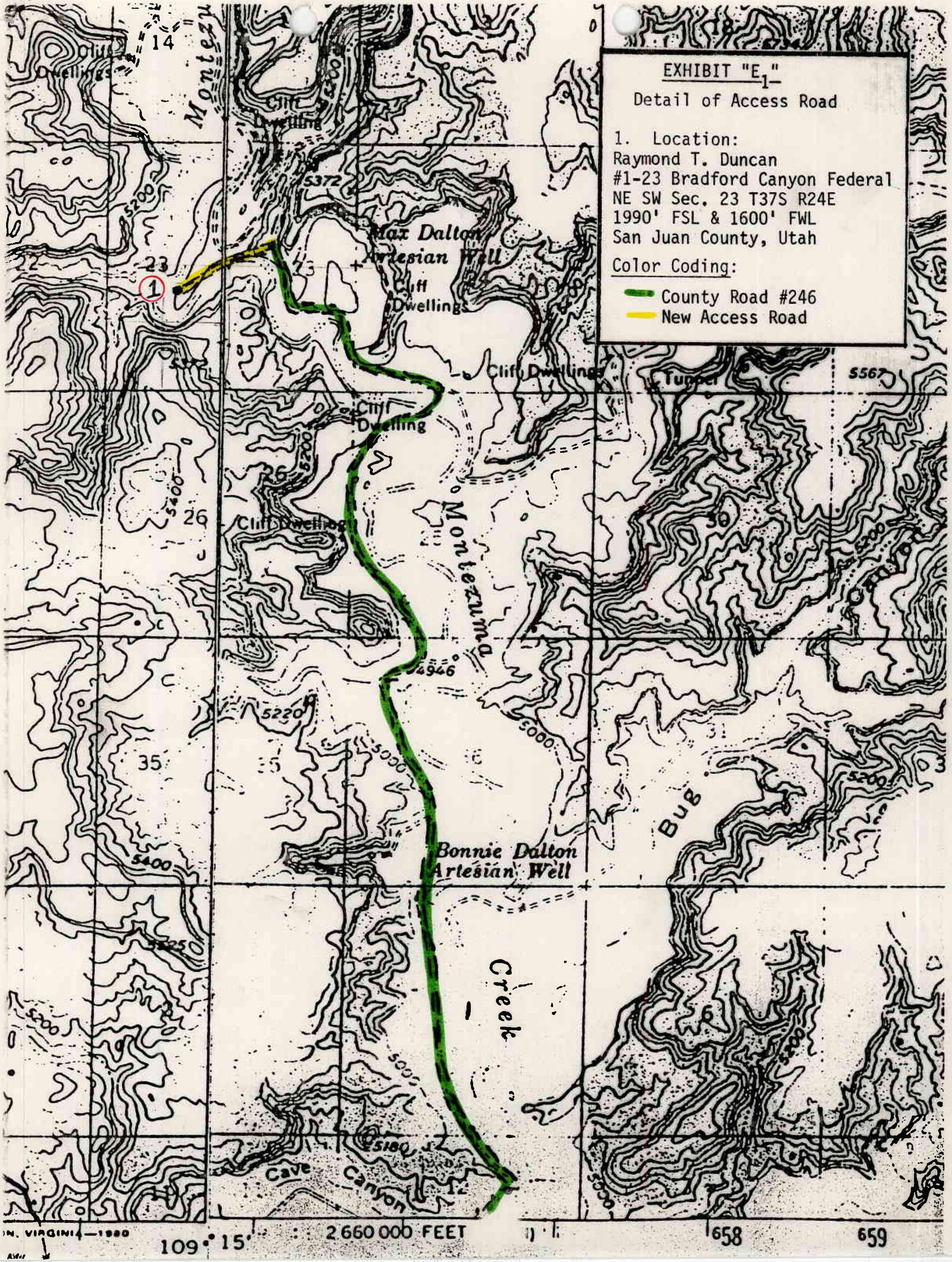


EXHIBIT "E1"
Detail of Access Road
1. Location:
Raymond T. Duncan
#1-23 Bradford Canyon Federal
NE SW Sec. 23 T37S R24E
1990' FSL & 1600' FWL
San Juan County, Utah
Color Coding:
County Road #246
New Access Road
Max Dalton Artesian Well
Bonnie Dalton Artesian Well
Cliff Dwellings
Cliff Dwelling
Montezuma Creek
Tunnel
Bug
Cave Canyon
2 660 000 FEET
109° 15'
658
659

Walter Duncan OIL PROPERTIES

1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

August 25, 1982

Minerals Management Service
1745 W. 1700 So. Suite 2000
Salt Lake City, UT 84104

CERTIFIED MAIL

CONFIDENTIAL: TIGHT HOLE

ATTN: Edgar W. Guynn
District Supervisor

RE: Bradford Canyon Federal 1-23
Sec. 23-T37S-R24E
San Juan County, Utah

Dear Sir:

Enclosed are four copies of Form 9-330 (Well Completion Report) for the above-captioned well.

Please notice that we have designated this well as a TIGHT HOLE, and are requesting that all records and correspondence pertaining to this well be kept confidential for the maximum period allowed.

If you have questions or need additional information, please notify our office.

Very truly yours,
RAYMOND T. DUNCAN

W. S. Fallin

W.S. Fallin
Chief Engineer

cl
Encl.

bcc: Tricentrol
MCOR Oil & Gas Corp.
Santa Fe Energy
Diamond Shamrock

Measurement Consultants
4100 S. PARKER RD. #1000A * AURORA, CO. 80014 * (303) 337-6818

Station 0.19/001 | Mo. September | Yr. 82

CLIENT : W. DUNCAN OIL PROPERTIES
1777 SOUTH HARRISON STREET
DENVER, COLORADO 80210
ATTN: STEVE FALLIN

STATION : Bradford Canyon 1-23
NESW 23-37S-24E
Wildcat/San Juan Co., Utah

P BASE	FPB	ATM	T BASE	TAP	CONN	STATIC	DIFFER	ROT	MTR FAC	L/R	TUBE SIZE	CH4	CO2	N2	FPV B	TYPE
14.730	1.0000	11.50	60.0	F	D	250.0	100.0	166	4.9497	L	2.067	80.79	8.00	0.50	0	D

ON	OFF	ORIFICE	TEMP F	GRAVITY	PSIG	HRS ON	DIFF	FB	FTF	FG	FrV*Fa	FPV	INT	VOLUME	BTU	MMBTU
86	1	1.250	41	0.824	5.9	117	76.0	345.130	1.0189	1.1016	1.0000	1.0008	856	1643	0	0

Measurement Concepts Inc.
4100 S. PARKER RD. #100D9 * AURORA, CO. 80014 * (303) 337-6816

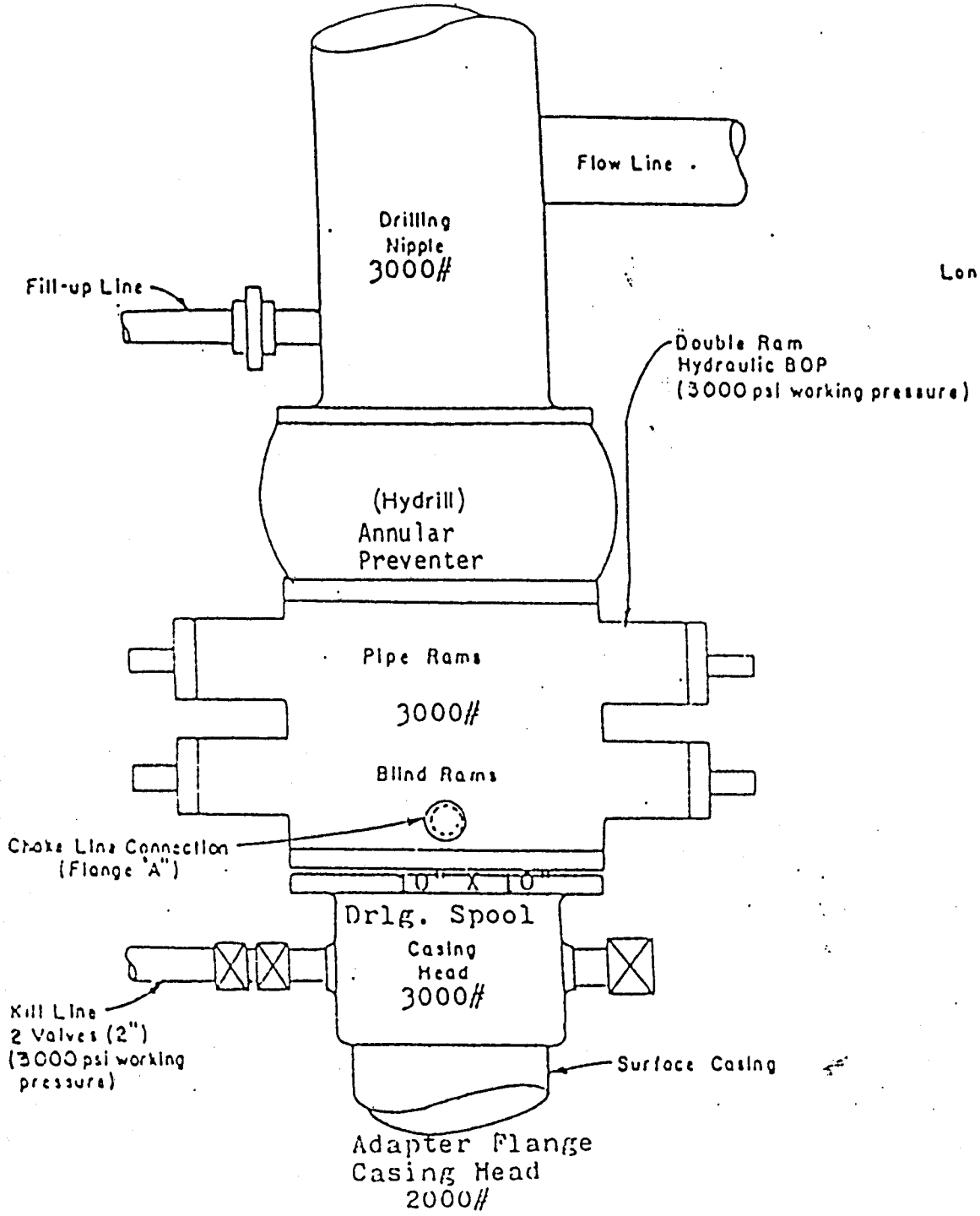
Station	Mo.	Yr.
019/001	October	92

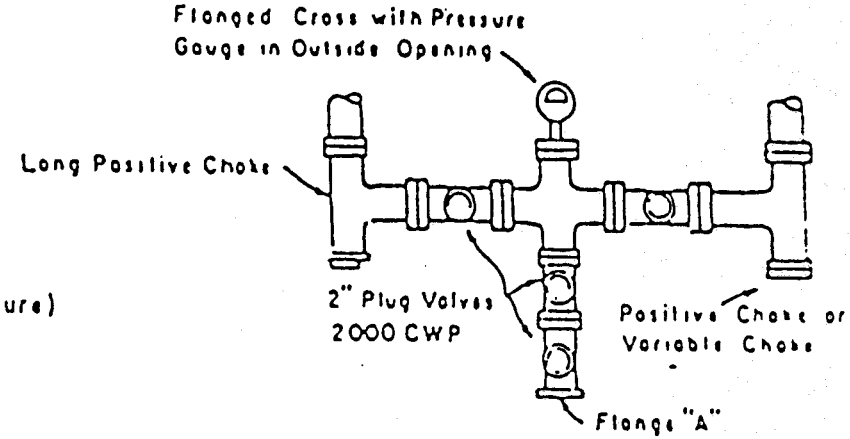
CLIENT : W. DUNCAN OIL PROPERTIES
1777 SOUTH HARRISON STREET
DENVER, COLORADO 80210
ATTN: STEVE FALLIN

STATION : Bradford Canyon 1-23
NESW 23-37S-24E
Wildcat/San Juan Co., Utah

P BASE	FPB	ATM	T BASE	TOP	CONN	STATIC	DIFFER	ROT	MTR FAC	L/R	TUBE SIZE	CH4	CO2	N2	FPV 9	TYPE
14.730	1.0000	11.90	60.0	F	D	850.0	100.0	168	4.9457	L	2.067	65.79	0.00	0.50	0	D

ON	OFF	ORIFICE	TEMP F	GRAVITY	PSIG	HRS ON	DIFF	FB	FTF	FB	FrV*Fa	FPV	INT	VOLUME	BTU	MMBTU
1	3	1.250	37	0.824	14.8	49	88.1	345.130	1.0229	1.1016	1.0000	1.0022	457	882	0	0
3	4	1.250	39	0.824	19.4	31	97.2	345.133	1.0208	1.1016	1.0000	1.0029	344	663	0	0
4	10	1.500	53	0.824	38.1	137	34.7	542.270	1.0058	1.1016	1.0000	1.0036	1148	3437	0	0
10	17	1.500	56	0.824	33.4	167	20.6	542.270	1.0039	1.1016	1.0000	1.0257	1095	3269	0	0
17	24	1.500	56	0.824	40.4	146	17.3	542.270	1.0039	1.1016	1.0000	1.0259	886	2645	0	0
24	31	1.500	49	0.824	40.3	169	29.2	542.270	1.0107	1.1016	1.0000	1.0051	1328	3993	0	0





PLAN VIEW - CHOKE MANIFOLD

EXHIBIT "C"
BLOWOUT PREVENTER
DIAGRAM

CORE ANALYSIS RESULTS

for

RAYMOND T. DUNCAN

NO. 1-23 BRADFORD CANYON FEDERAL WELL
WILDCAT
SAN JUAN COUNTY, UTAH

RAYMOND T. DUNCAN
#1-23 BRADFORD CANYON FEDERAL
WILDCAT
SAN JUAN COUNTY

FORMATION : ISMAY
DRLG. FLUID: WBM
LOCATION : NE,SW SEC.23-37S-24E
STATE : UTAH

DATE : 8-5-82
FILE NO. : RP-3-3223
ANALYSTS : GGIDS
ELEVATION: 5026 KB

FULL DIAMETER CORE ANALYSIS--BOYLES LAW HELIUM POROSITY

SAMP. NO.	DEPTH	PERM. TO AIR (MD) HORZ.	90 DEG.	POR. B.L.	FLUID SATS. OIL	WATER	GR. DNS.	DESCRIPTION
	5170-5189							ANHYDRITE - NO ANALYSIS
	5189-5190							DOL SL/SHL - NO ANALYSIS
1	5190-91	<0.01	*	7.1	1.7	50.7	2.85	DOL BRN RTHY
	5191-5194							DOLOMITE - NO ANALYSIS
	5194-5195							DOL/SHL - NO ANALYSIS
	5195-5197							DOLOMITE - NO ANALYSIS
2	5197-98	0.03	*	5.9	7.4	35.5	2.87	DOL BRN RTHY
	5198-5203							DOLOMITE - NO ANALYSIS
3	5203 -4	<0.01	*	7.9	3.3	80.2	2.82	DOL BRN RTHY SL/LM
	5204-5206							DOLOMITE - NO ANALYSIS
4	5206 -7	21**	*	7.1	0.0	58.0	2.85	DOL BRN/GRY VFXLN SL/ANHY
5	5207 -8	1.8	*	8.1	3.0	47.4	2.85	DOL BRN/GRY VFXLN SL/ANHY
6	5208 -9	1.4	*	7.8	3.6	40.0	2.84	DOL BRN/GRY VFXLN LM
7	5209-10	1.1	0.66	9.0	1.2	60.6	2.78	DOL BRN/GRY VFXLN LM VUG
8	5210-11	2.3	1.1	10.4	6.4	25.6	2.78	DOL BRN/GRY VFXLN LM VUG
9	5211-12	27	13	13.6	5.7	19.6	2.78	DOL BRN/GRY VFXLN LM VUG
10	5212-13	24	16	14.5	5.1	20.3	2.78	DOL BRN/GRY VFXLN LM VUG
11	5213-14	34	31	15.0	6.7	28.7	2.78	DOL BRN/GRY VFXLN LM VUG
12	5214-15	35	31	13.6	8.7	27.0	2.77	DOL BRN/GRY VFXLN LM VUG
13	5215-16	10	9.0	12.6	4.3	23.9	2.75	DOL BRN/GRY VFXLN LM VUG
14	5216-17	10	*	9.1	4.2	33.9	2.76	DOL BRN/GRY VFXLN LM VUG
15	5217-18	23	19	12.4	4.8	25.0	2.76	DOL BRN/GRY VFXLN LM VUG
16	5218-19	8.1	0.68	12.4	3.7	33.7	2.77	DOL BRN/GRY VFXLN LM VUG
17	5219-20	8.9	3.6	11.5	6.0	26.2	2.77	DOL BRN/GRY VFXLN LM VUG
18	5220-21	3.6	1.0	10.7	6.4	23.7	2.79	DOL BRN/GRY VFXLN LM VUG

RAYMOND T. DUNCAN
#1-23 BRADFORD CANYON FEDERAL
WILDCAT
SAN JUAN COUNTY

FORMATION : ISMAY
DRLG. FLUID: WBM
LOCATION : NE,SW SEC.23-37S-24E
STATE : UTAH

DATE : 8-5-82
FILE NO. : RP-3-3223
ANALYSTS : GG;DS
ELEVATION: 5026 KB

FULL DIAMETER CORE ANALYSIS--BOYLES LAW HELIUM POROSITY

SAMP. NO.	DEPTH	PERM. TO AIR (MD) HORZ.	PERM. TO AIR (MD) 90 DEG.	POR. B.L.	FLUID SATS. OIL	FLUID SATS. WATER	GR. DNS.	DESCRIPTION
19	5221-22	9.5	6.4	12.3	1.3	43.0	2.80	DOL BRN/GRY VFXLN LM VUG
20	5222-23	1.5	1.1	8.9	2.3	34.7	2.83	DOL BRN/GRY VFXLN LM SL/VUG SL/ANHY
21	5223-24	20	*	10.0	4.0	38.3	2.80	DOL BRN/GRY VFXLN LM SL/VUG SL/ANHY
22	5224-25	1.1	*	7.2	0.0	40.6	2.79	DOL BRN/GRY VFXLN LM SL/VUG SL/ANHY
23	5225-26	1.2	*	6.4	0.0	34.5	2.80	DOL BRN/GRY VFXLN LM SL/ANHY
	5226-5228							LM/DOL/ANHY - NO ANALYSIS
	5228-5229							RUBBLE - NO ANALYSIS

* SAMPLE UNSUITABLE FOR FULL DIAMETER ANALYSIS, PLUG USED
** FRACTURE PERMEABILITY

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

JOB NO.	RP-3-3223	
FORMATION	ISMAY	
DEPTH INTERVAL	5210	5221
INTERVAL THICKNESS (FEET)	11	
FEET INCLUDED IN AVERAGE	11	
TOTAL PERMEABILITY	185.90	
AVERAGE PERM ARITHMETIC	16.90	
AVERAGE PERMEABILITY GEOMETRIC	12.39	
TOTAL POROSITY	135.8	
AVERAGE POROSITY	12.3	
AVERAGE B/A-F	957.8	
TOTAL OIL SATURATION	61.9	
OIL SATURATION ARITHMETIC AVER.	5.6	
OIL SATURATION POR. AVER.	5.7	
TOTAL WATER SATURATION	287.6	
WATER SAT. ARITHMETIC AVERAGE	26.1	
WATER SAT. POR. AVER.	25.9	
FORMATION VOLUME FACTOR	1.4	
AVERAGE CONNATE WATER	23.0	
STOCK TANK OIL IN PLACE	526.8	

5210-5221 - Gas/Oil Productive
5221-5226 - Water Productive where permeable

CORE LABORATORIES, INC. *Petroleum Reservoir Engineering*

COMPANY RAYMOND T. DUNCAN FIELD WILDCAT FILE RP-3-3223

WELL #1-23 BRADFORD CANYON COUNTY SAN JUAN DATE 8-5-82

LOCATION NE,SW SEC.23-37S-24E STATE UTAH ELEV.

CORE-GAMMA CORRELATION

VERTICAL SCALE: 5" = 100'

CORE-GAMMA SURFACE LOG
(PATENT APPLIED FOR)

GAMMA RAY
RADIATION INCREASE →

ISMAY FORMATION

COREGRAPH

TOTAL WATER
PERCENT TOTAL WATER
80 60 40 20 0

PERMEABILITY — MILLIDARCYS
100 50 10 5 1

POROSITY — PERCENT
30 20 10 0

OIL SATURATION - - - - - PERCENT PORE SPACE
0 20 40 60 80

5170

5229

CONFIDENTIAL:
TIGHT HOLE

RAYMOND T. DUNCAN
BRADFORD CANYON FEDERAL #1-23
NE SW SEC 23 T37S R24E
SAN JUAN COUNTY, UTAH

WELLSITE GEOLOGIST: Jim Holst
INTERMOUNTAIN CONSULTING SERVICE
P.O. Box 74
112 Big Horn Road
Casper, Wyoming 82602
(307) 235-6651

Drill Stem Test #2 (5430' - 5460') 30 Ft. Test Lower Desert Creek

TYPE: Bottom Hole Conventional with no cushion

FLOWS:

IF - 15 minutes - open with strong blow, 20 lb. in 1 minute (1/8" CH), gas to surface in 4 minutes at 34 lb. (1/2" CH) Maximum flow 212.9 MCF/day, minute flow 175.3 MCF/day.

ISI - 30 minutes - action slowly died.

FF - 60 minutes - open with strong blow, 23 lb. in 3 minutes (1/2" CH), 30 lb. in 10 minutes (1/8" CH), 20 lb. in 20 minutes (1/2" CH), 9 lb. in 40 minutes (1/2" CH), 7 lb. in 60 minutes (1/2" CH), maximum flow 150.3 MCF/day, minute flow 43.8 MCF/day.

FSI - 115 minutes - action slowly died.

RECORDER FIELD PRESSURES:

	Inside	Outside
Location (Depth)	5402	5436
IH	3704	3765
IF	93-130	154-173
ISI	3200	3205
FF	121-168	191-229
FSI	3443	3401
FH	3611	3672
Bottom Hole Temperature	135°F	135°F

RECOVERY:

Drill Pipe: 770' (4.003 Barrels) oil, reversed out, 45°F API GRAV. at 71°F

Sample Chamber: 1.18 cu ft gas
500 cc oil 45° API GRAV. at 71°F
500 cc Total at 175 PSI

RESISTIVITIES:

Pit Mud: 0.32 at 78°F

Pit Mud Filtrate: 0.22 at 80°F, 40,000 PPM CHL

CL1-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

OPERATOR Duncan Oil Properties
WELL NO. Bradford Canyon Federal 1-23
FIELD Wildcat
COUNTY San Juan
STATE Utah

DATE 8-16-82 LAB NO. 21243-1
LOCATION NESW 23-37S-24E
FORMATION
INTERVAL 5229'
SAMPLE FROM DST #1 (Top)

REMARKS & CONCLUSIONS:

Cations	mg/l	meq/l	Anions	mg/l	meq/l
Sodium	16589	721.64	Sulfate	2300	47.84
Potassium	183	4.68	Chloride	27500	775.50
Lithium	-	-	Carbonate	88	2.93
Calcium	2080	103.79	Bicarbonate	244	4.00
Magnesium	2	0.16	Hydroxide	-	-
Iron	present		Hydrogen sulfide	-	-
Total Cations		830.27	Total Anions		830.27

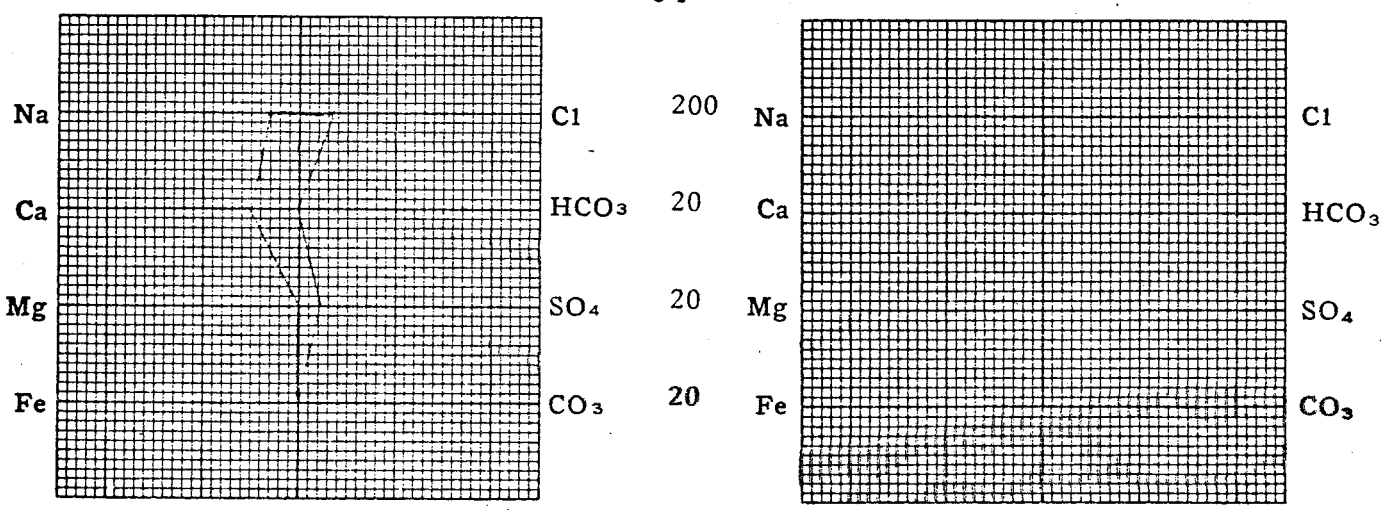
Total dissolved solids, mg/l 48862
NaCl equivalent, mg/l 48059
Observed pH 9.4

Specific resistance @ 68°F.:
Observed 0.205 ohm-meters
Calculated 0.145 ohm-meters

WATER ANALYSIS PATTERN

Sample above described

Scale
MEQ per Unit



(Na value in above graphs includes Na, K, and Li)
NOTE: Mg/l=Milligrams per liter Meq/l= Milligram equivalents per liter
Sodium chloride equivalent=by Dunlap & Hawthorne calculation from components

CL1-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

OPERATOR	Duncan Oil Properties	DATE	8-16-82 LAB NO. 41243-2
WELL NO.	Bradford Canyon Federal 1-23	LOCATION	NESW 23-37S-24E
FIELD	Wildcat	FORMATION	
COUNTY	San Juan	INTERVAL	5229'
STATE	Utah	SAMPLE FROM	DST #1 (Middle)

REMARKS & CONCLUSIONS:

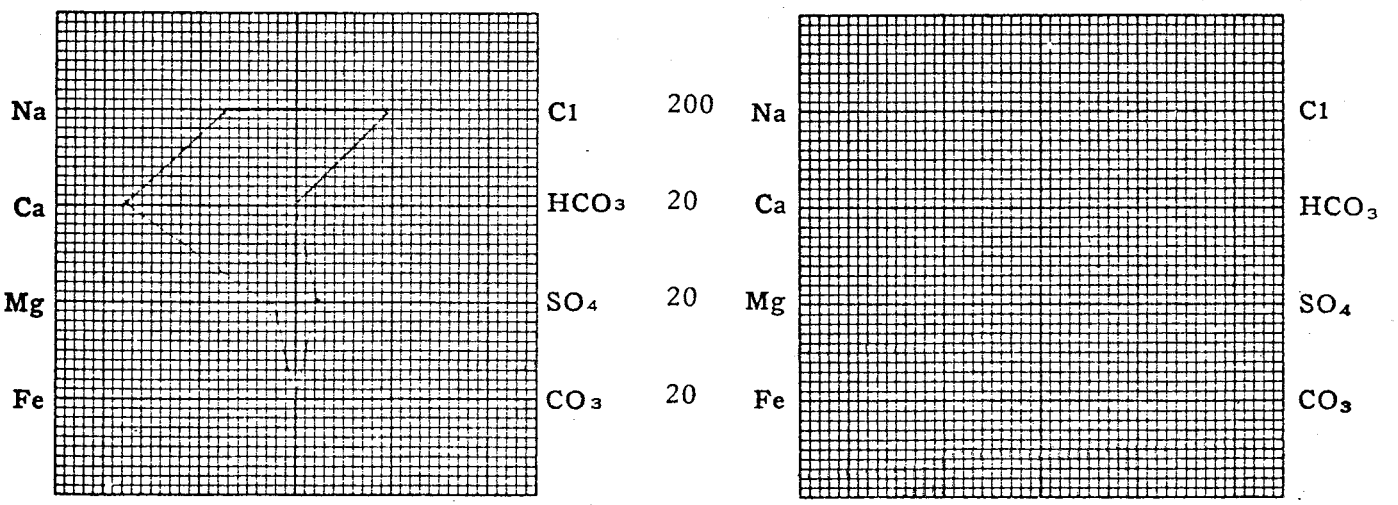
Cations	mg/l	meq/l	Anions	mg/l	meq/l
Sodium	35805	1557.50	Sulfate	2430	50.54
Potassium	990	25.34	Chloride	69500	1959.90
Lithium	-	-	Carbonate	0	0.00
Calcium	7489	373.70	Bicarbonate	297	4.87
Magnesium	715	58.77	Hydroxide	-	-
Iron	-	-	Hydrogen sulfide	-	-
Total Cations		2015.31	Total Anions		2015.31

Total dissolved solids, mg/l	117075	Specific resistance @ 68°F.:	
NaCl equivalent, mg/l	116531	Observed	0.129 ohm-meters
Observed pH	7.7	Calculated	0.072 ohm-meters

WATER ANALYSIS PATTERN

Sample above described

Scale
MEQ per Unit



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CL1-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

OPERATOR	Duncan Oil Properties	DATE	8-16-82 LAB NO. 41243-3
WELL NO.	Bradford Canyon Federal 1-23	LOCATION	NESW 23-37S-24E
FIELD	Wildcat	FORMATION	
COUNTY	San Juan	INTERVAL	5229'
STATE	Utah	SAMPLE FROM	DST #1 (Bottom)

REMARKS & CONCLUSIONS:

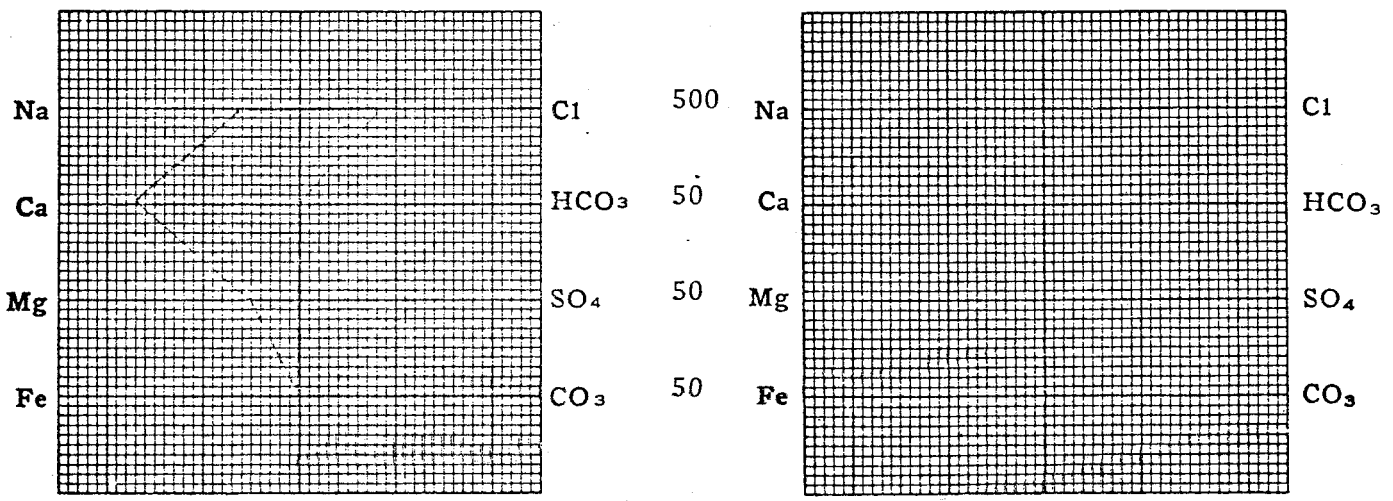
Cations	mg/l	meq/l	Anions	mg/l	meq/l
Sodium	75829	3298.57	Sulfate	703	14.62
Potassium	2640	67.58	Chloride	158500	4469.70
Lithium	-	-	Carbonate	0	0.00
Calcium	17173	856.93	Bicarbonate	280	4.59
Magnesium	3234	265.83	Hydroxide	-	-
Iron	-	-	Hydrogen sulfide	-	-
Total Cations		4488.91	Total Anions		4488.91

Total dissolved solids, mg/l	258217	Specific resistance @ 68°F.:	
NaCl equivalent, mg/l	259963	Observed	0.085 ohm-meters
Observed pH	6.9	Calculated	0.044 ohm-meters

WATER ANALYSIS PATTERN

Sample above described

Scale
MEQ per Unit



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CL1-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

OPERATOR Duncan Oil Properties
WELL NO. Bradford Canyon Federal 1-23
FIELD Wildcat
COUNTY San Juan
STATE Utah

DATE 8-16-82 LAB NO. 41243-4
LOCATION NESW 23-37S-24E
FORMATION
INTERVAL 5229'
SAMPLE FROM DST #1 (MFE)

REMARKS & CONCLUSIONS:

Cations	mg/l	meq/l	Anions	mg/l	meq/l
Sodium	95169	4139.86	Sulfate	713	14.83
Potassium	2475	63.36	Chloride	190000	5358.00
Lithium	-	-	Carbonate	0	0.00
Calcium	18517	924.00	Bicarbonate	186	3.05
Magnesium	3025	248.66	Hydroxide	-	-
Iron	-	-	Hydrogen sulfide	-	-
Total Cations		5375.88	Total Anions		5375.88

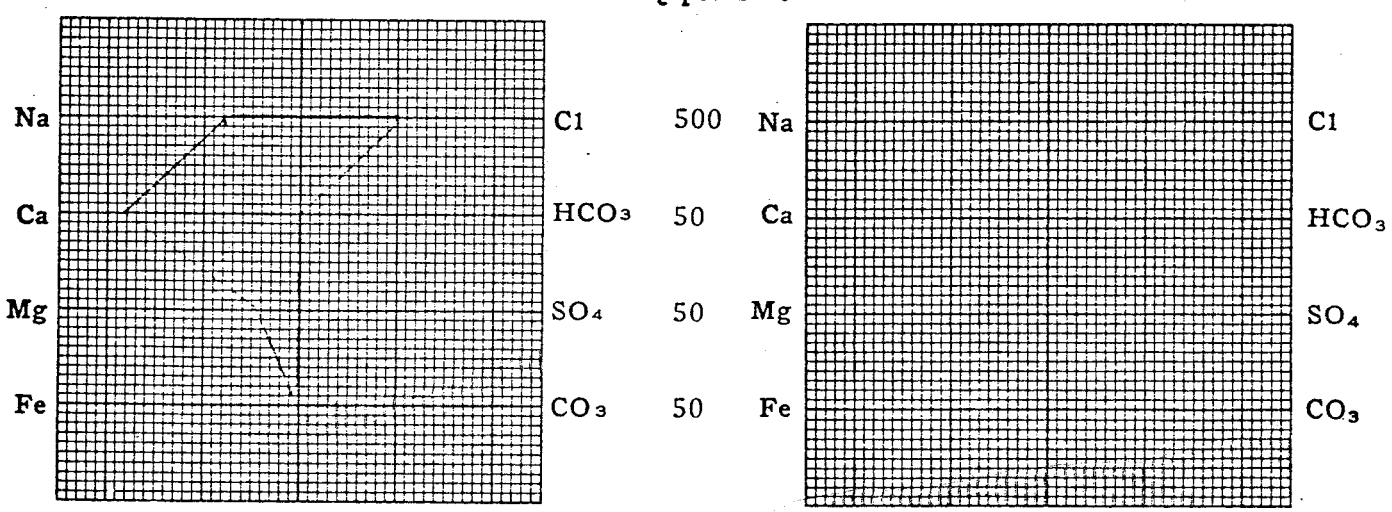
Total dissolved solids, mg/l 309991
NaCl equivalent, mg/l 311502
Observed pH 6.5

Specific resistance @ 68°F.:
Observed 0.110 ohm-meters
Calculated 0.220 ohm-meters

WATER ANALYSIS PATTERN

Sample above described

Scale
MEQ per Unit



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CL1-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

OPERATOR	Duncan Oil Properties	DATE	8-16-82 LAB NO. 21243-1
WELL NO.	Bradford Canyon Federal 1-23	LOCATION	NESW 23-37S-24E
FIELD	Wildcat	FORMATION	
COUNTY	San Juan	INTERVAL	5229'
STATE	Utah	SAMPLE FROM	DST #1 (Top)

REMARKS & CONCLUSIONS:

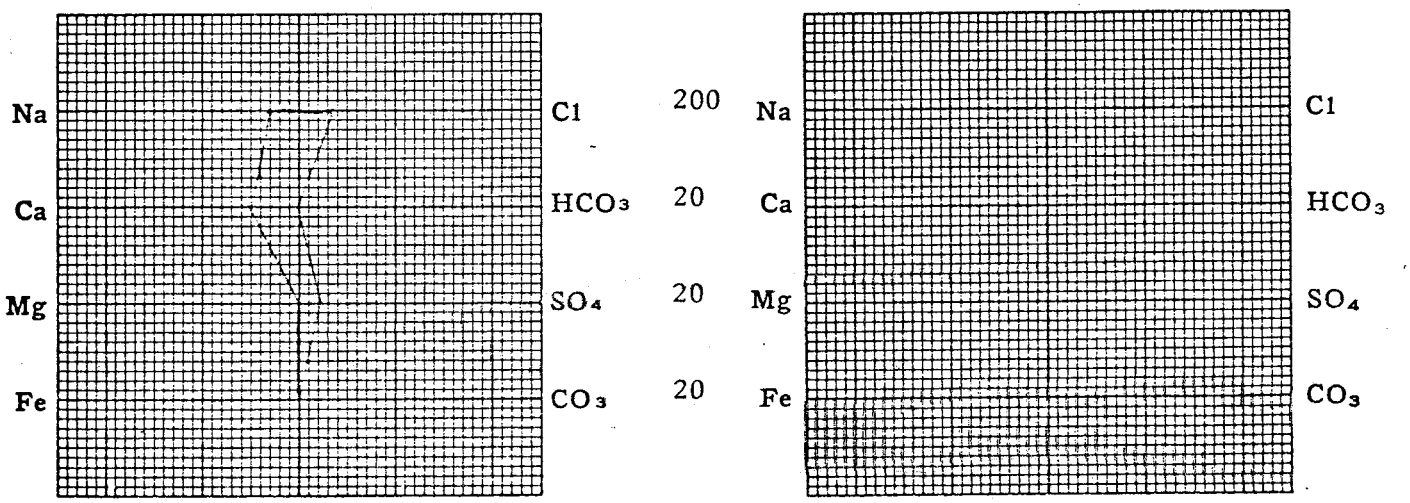
Cations	mg/l	meq/l	Anions	mg/l	meq/l
Sodium	16589	721.64	Sulfate	2300	47.84
Potassium	183	4.68	Chloride	27500	775.50
Lithium	-	-	Carbonate	88	2.93
Calcium	2080	103.79	Bicarbonate	244	4.00
Magnesium	2	0.16	Hydroxide	-	-
Iron	present		Hydrogen sulfide	-	-
Total Cations		830.27	Total Anions		830.27

Total dissolved solids, mg/l	48862	Specific resistance @ 68°F.:	
NaCl equivalent, mg/l	48059	Observed	0.205 ohm-meters
Observed pH	9.4	Calculated	0.145 ohm-meters

WATER ANALYSIS PATTERN

Sample above described

Scale
MEQ per Unit



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CL1-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

OPERATOR	Duncan Oil Properties	DATE	8-16-82 LAB NO. 41243-2
WELL NO.	Bradford Canyon Federal 1-23	LOCATION	NESW 23-37S-24E
FIELD	Wildcat	FORMATION	
COUNTY	San Juan	INTERVAL	5229'
STATE	Utah	SAMPLE FROM	DST #1 (Middle)

REMARKS & CONCLUSIONS:

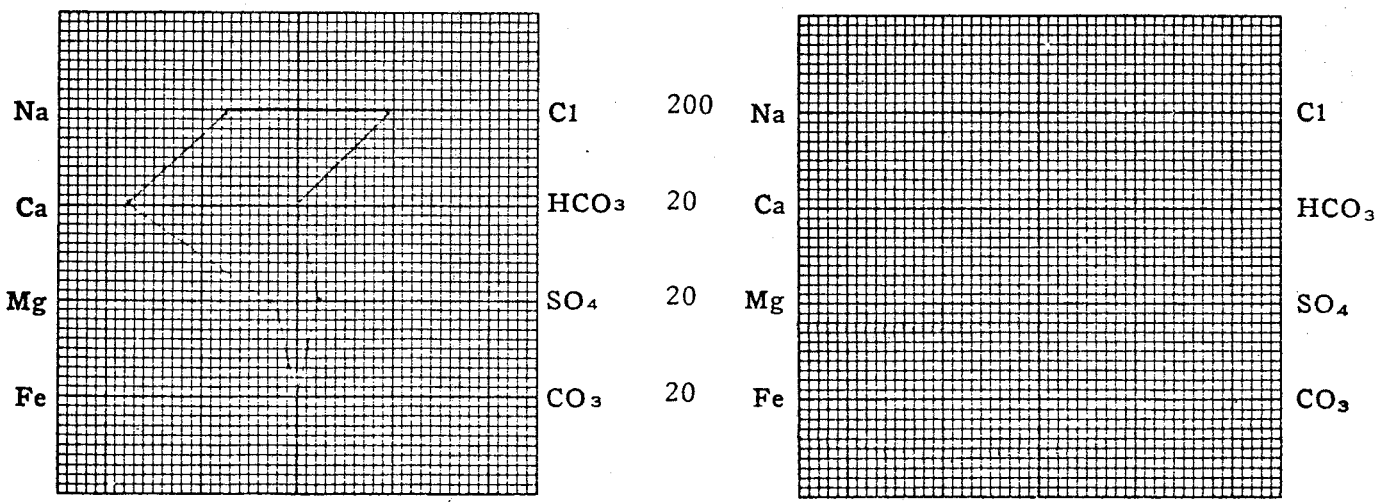
Cations	mg/l	meq/l	Anions	mg/l	meq/l
Sodium	35805	1557.50	Sulfate	2430	50.54
Potassium	990	25.34	Chloride	69500	1959.90
Lithium	-	-	Carbonate	0	0.00
Calcium	7489	373.70	Bicarbonate	297	4.87
Magnesium	715	58.77	Hydroxide	-	-
Iron	-	-	Hydrogen sulfide	-	-
Total Cations		2015.31	Total Anions		2015.31

Total dissolved solids, mg/l	117075	Specific resistance @ 68°F.:	
NaCl equivalent, mg/l	116531	Observed	0.129 ohm-meters
Observed pH	7.7	Calculated	0.072 ohm-meters

WATER ANALYSIS PATTERN

Sample above described

Scale
MEQ per Unit



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CL1-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

OPERATOR	Duncan Oil Properties	DATE	8-16-82 LAB NO. 41243-3
WELL NO.	Bradford Canyon Federal 1-23	LOCATION	NESW 23-37S-24E
FIELD	Wildcat	FORMATION	
COUNTY	San Juan	INTERVAL	5229'
STATE	Utah	SAMPLE FROM	DST #1 (Bottom)

REMARKS & CONCLUSIONS:

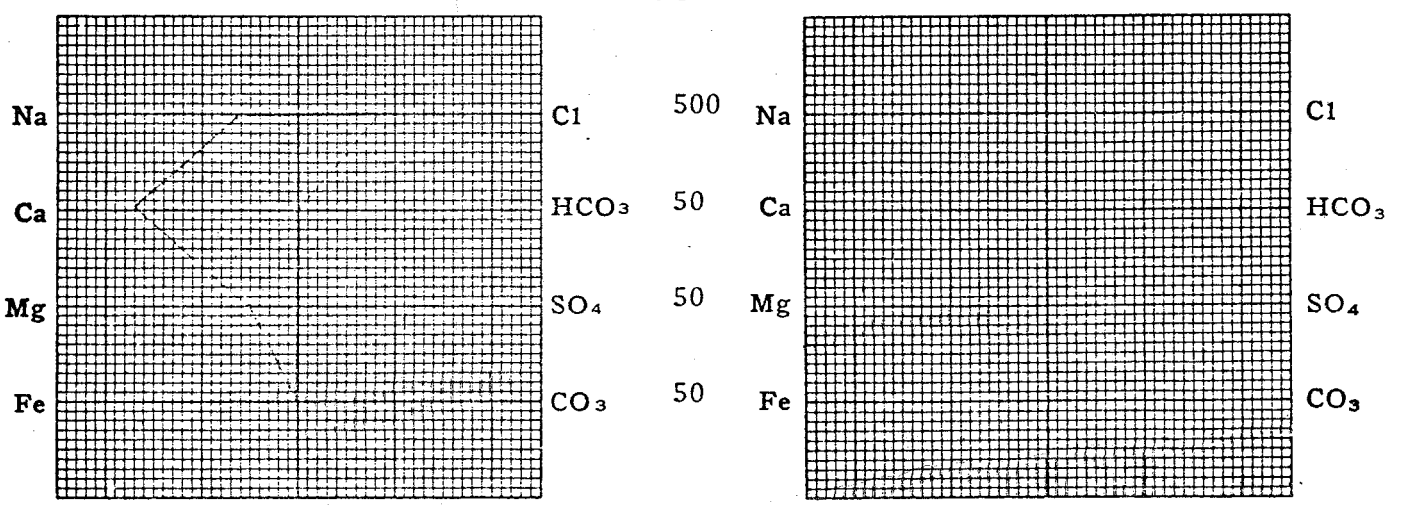
Cations	mg/l	meq/l	Anions	mg/l	meq/l
Sodium	75829	3298.57	Sulfate	703	14.62
Potassium	2640	67.58	Chloride	158500	4469.70
Lithium	-	-	Carbonate	0	0.00
Calcium	17173	856.93	Bicarbonate	280	4.59
Magnesium	3234	265.83	Hydroxide	-	-
Iron	-	-	Hydrogen sulfide	-	-
Total Cations		4488.91	Total Anions		4488.91

Total dissolved solids, mg/l	258217	Specific resistance @ 68°F.:	
NaCl equivalent, mg/l	259963	Observed	0.085 ohm-meters
Observed pH	6.9	Calculated	0.044 ohm-meters

WATER ANALYSIS PATTERN

Sample above described

Scale
MEQ per Unit



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CL1-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

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WATER ANALYSIS REPORT

OPERATOR Duncan Oil Properties
WELL NO. Bradford Canyon Federal 1-23
FIELD Wildcat
COUNTY San Juan
STATE Utah

DATE 8-16-82 LAB NO. 41243-4
LOCATION NESW 23-37S-24E
FORMATION
INTERVAL 5229'
SAMPLE FROM DST #1 (MFE)

REMARKS & CONCLUSIONS:

Cations	mg/l	meq/l	Anions	mg/l	meq/l
Sodium	95169	4139.86	Sulfate	713	14.83
Potassium	2475	63.36	Chloride	190000	5358.00
Lithium	-	-	Carbonate	0	0.00
Calcium	18517	924.00	Bicarbonate	186	3.05
Magnesium	3025	248.66	Hydroxide	-	-
Iron	-	-	Hydrogen sulfide	-	-
Total Cations		5375.88	Total Anions		5375.88

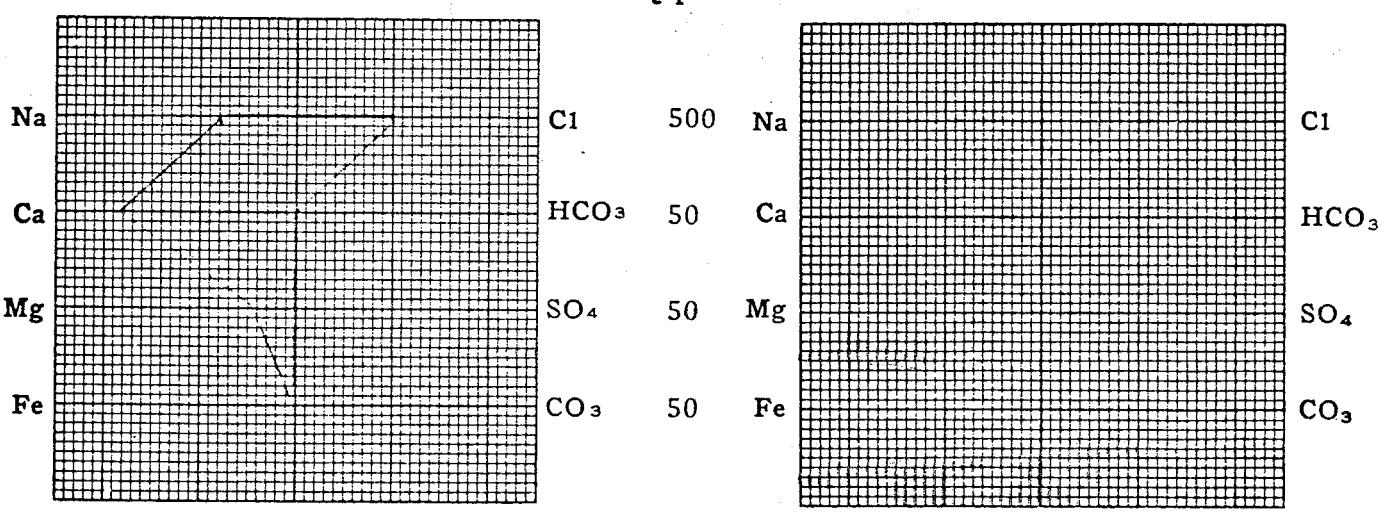
Total dissolved solids, mg/l 309991
NaCl equivalent, mg/l 311502
Observed pH 6.5

Specific resistance @ 68°F.:
Observed 0.110 ohm-meters
Calculated 0.220 ohm-meters

WATER ANALYSIS PATTERN

Sample above described

Scale
MEQ per Unit



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Sodium chloride equivalent=by Dunlap & Hawthorne calculation from components

INDEX

WELL DATA

OPERATOR:	Raymond T. Duncan 1777 S. Harrison Penthouse #1 Denver, Colorado 80210
OTHER INTERESTED PARTIES:	Tricentrol 5675 S. Tamarac Pkwy. Gateway Place #200 Englewood, Colorado 80111
	MCOR Oil and Gas Corp. 10880 Wilshire Blvd. Los Angeles, California 90024
	Santa Fe Energy 2600 Security Life Bldg. Denver, Colorado 80202
	Diamond Shamrock 410 17th Street Suite #600 Denver, Colorado 80202
	Marathon Oil Company P.O. Box 120 Casper, Wyoming 82602
WELL NAME:	Bradford Canyon Federal #1-23
LOCATION:	NE SW Section 23, T37S, R24E 1990' FSL, 1600' FWL San Juan County, Utah
FIELD:	Wildcat
GROUND LEVEL ELEVATION:	5011 Feet
KELLY BUSHING:	5026 Feet
GEOLOGIST:	Jim Holst Intermountain Consulting Service 3500'- T.D.

MUDLOGGING:	Tooke Engineering Unit #T-122 Two Man Logging Unit Loggers: Barry Sylvester Lynn Fechter
SPUD DATE:	1:30 A.M. July 24, 1982
CEASED DRILLING:	12:30 P.M. August 9, 1982
CONTRACTOR:	Coleman Drilling Rig #3 Drawer 3337 Farmington, New Mexico 87401
TOOL PUSHER:	Glen Storie John Richardson
DRILLERS:	F. Mairid C.D. Keenom D.L. Ferguson J. Coberly
COMPANY MAN:	J.A. "Arkie" Browning P.O. Box 1058 Cortez, Colorado 81321
RIG EQUIPMENT:	Type Drawworks - IDECO H-44 Derrick - IDECO 112 ft. 268,000 LBS Max. Pump #1 - IDECO 550 15" x 5" Liner Pump #2 - IDECO 550 15" x 5 1/2" Liner Drill Pipe - 4 1/2 inch X-Hole Drill Collars - 6 1/2 inch X-Hole
DRILLING FLUIDS:	Drilling Mud Inc. P.O. Box 1179 Cortez, Colorado 81321 Engineer - Don Bryant Jim Munson Mud Type - Salt Gel, Starch
SUFRACE CASING:	Driller - 97 feet 13 3/8 inch 2170 feet 8 5/8 inch Logger - 2164 feet
TOTAL DEPTH:	Driller - 5560 feet Logger - 5550 feet

BOTTOM HOLE TEMPERATURE:	E-Logger 134°F
SAMPLES:	30' Surface to 2200' 10' 2200' to T.D. Wet cuts sent to Amstrat, Denver Colorado, 10' samples, dry cut, from Ismay top to T.D.; sent to Duncan in Denver. Show samples sent to Denver.
CORES:	Core #1 5170' - 5229'; American Goldset Corp. (ACC); Delbert "Skip" Leonard - Core Hand. Cut 59 feet, recovered 59 feet, Core picked up by Core Lab, Farmington for core analysis.
DRILL STEM TEST #1:	Upper Ismay (5179' - 5229') Johnston-Macco, Tester - Keith Koerner
DRILL STEM TEST #2:	Lower Desert Creek (5430' - 5460') Johnston-Macco, Tester - Keith Koerner
ELECTRICAL LOGS:	Gearhart Industries, Inc. Engineer - John Gegg
ELECTRICAL LOGS RUN:	DLL with GR & CAL Base surface casing to total depth BHC Sonic with GR & CAL Base surface casing to total depth FDC-CNL with GR & CAL 3700' - total depth DIPMETER 5100' to total depth

CHRONOLOGY

July 24, 1982	Spudded at 1:30 A.M.; drilled 111 feet of 17 1/2 inch hole; ran 97 feet (3 joints) of 13 3/8 inch casing; plug down at 8:45 A.M.; cement with 150 sacks 3% CaCl; set casing at 111 feet; drill out from under casing at 7:15 P.M.; drilling 12 1/4 inch hole; drilled from 111 feet to 134 feet; drilling ahead.
July 25, 1982	Drilled from 134 feet to 830 feet; trip out of hole at 667 feet for new bit; drilling ahead.
July 26, 1982	Drilled from 830 feet to 1430 feet; drilling ahead.
July 27, 1982	Drilled from 1430 feet to 1583 feet; trip out of hole for new bit #4a Reed (FP-52); trip into hole; wash and ream 150 feet to bottom; drilled from 1583 feet to 1997 feet; drilling ahead.
July 28, 1982	Drilled from 1997 feet to 2170 feet; trip out of hole; lay down 8 inch drill collars; rig up casing crew; ran 2170 feet (54 joints) 8 5/8 inch casing; cement with 850 sacks B.J. Lite 150 sacks class B cement 2% CaCl; pick up 100 feet 1 inch pipe; cement back side with 100 sacks cement at 3% CaCL; wait on cement and nipple up.
July 29, 1982	Wait on cement; pressure test B.O.P. rams to 3000 pounds; trip into hole; drilled 55 feet of cement; drilled out from under cement at 4:30 A.M.; drilled from 2170 feet to 3060 feet.
July 30, 1982	Drilled from 3060 feet to 4064 feet; drilling ahead; Geologist and Mudloggers on location.
July 31, 1982	Drilled from 4064 feet to 4301 feet; trip out of hole for new bit #6 (STC) F-3; S.L.M. depth correction +4 feet correction made; trip into hole; wash 30 feet to bottom; drilled from 4305 feet to 4427 feet; drilling ahead.

August 1, 1982	Drilled from 4427 feet to 4763 feet; drilling ahead.
August 2, 1982	Drilled from 4763 feet to 5021 feet; drilling ahead.
August 3, 1982	Drilled from 5021 feet to 5055 feet; trip out of hole for new bit #7 (REED) FP53; trip into hole; drilled from 5055 feet to 5170 feet; circulate and prepare to core #1.
August 4, 1982	Circulate and condition hole for core #1; trip out of hole for core; pick up core barrel; trip into hole; S.L.M. depth (5169.36 ft.); cut core #1.
August 5, 1982	Trip out with core #1; lay down jars, lay down core; trip into hole; circulate and condition hole for DST; pick up test tool; trip into hole.
August 6, 1982	Wait on daylight; finish tripping into hole with test tool; run drill stem test #1; trip out of hole; lay down test tool; trip into hole; ream 70 feet to bottom; drilled 5229 feet to 5258 feet; drilling ahead.
August 7, 1982	Drilled from 5258 feet to 5460 feet; circulate up samples; mix mud; well kicking; mud weight up to 13.1 lbs.
August 8, 1982	Circulate and mix and condition mud; short trip; circulate condition mud; trip out of hole, (S.L.M. depth correction -3 feet, no correction made); pick up test tool; trip into hole with test tool; run DST #2 (lower Desert Creek 5430-5460); trip out of hole with test tool; lay down test tool; trip into hole with RR bit #9.
August 9, 1982	Trip into hole; drilled from 5460 feet to 5560 feet; reached T.D. at 12:30 P.M.; circulate; condition hole; trip out of hole to the casing; trip into hole to condition and clean hole; circulate; trip out of hole to run E-logs; rig up E-loggers.

August 10, 1982	Electrical logging; tried to run DLL; equipment failure; wait on new equipment; run FDC-CNL; run Sonic log; run DLL; run Dipmeter; released Mud Logging unit.
August 11, 1982	Trip into hole; circulate and condition hole to run 5 1/2 inch production pipe; wait on logs; Geologist released; run production pipe; rig released.

DAILY DRILLING SUMMARY

DATE	DEPTH	DSS	WT	VISC	PH	API WATER LOSS	FC	PPM CHLORIDES	PPM CALCIUM	% SOLIDS	R.P.M. ROTARY	WT. ON BIT 1000 LBS	PUMP PRESSURE
7/23			RIGGING UP										
7/24		1	SPUD MUD								75	ALL	1200
7/25	408	2	8.4	28	8.0	N/C		400	TR	TR	60/70	12/15	1200/1350
7/26	958	3	8.4	28	8.0	N/C		400	20	.75	80	15/40	1350
7/27	1583	4	8.4	28	8.0	N/C		300	20	.75	80/70	40	1350/1450
7/28	2166	5	9.1	39	9.0	N/C		500	20	5.75	70	40	1550
7/29	2287	6	8.4	27	11.0	N/C		350	160	.75	70	40	1550/1600
7/30	3327	7	8.6	27	7.0	N/C		10,700	1600	2.25	70	40	1650
7/31		8	NO REPORT								70/60	40	1650/1700
8/1	4525	9	10.0	34	8.5	13.0	2/32	28,000	2000	12.0	60	40	1650
8/2	4850	10	10.8	36	11.5	8.0	2/32	23,500	1160	15.0	60	40	1650
8/3	5055	11	10.3	33	12.0	7.0	1/32	24,000	200	13.0	60	40	1800
8/4	5170	12	11.3	36	12.0	8.0	2/32	24,000	400	16.0	70	20	900
8/5	5229	13	11.2	38	12.0	13.8	2/32	28,000	840	16.0			
8/6	5229	14	D.S.T. #1								60	40	750
8/7	5335	15	11.2	43	12.0	11.8	2/32	31,000	2000	17.0	60/65	40/45	1550
8/8	5460	16	D.S.T. #2										
8/9	5515	17	13.4	46	11.5	10.0	2/32	41,000	1630	24.0	60	40/45	1850
8/10	5560	18	E-LOGS										

BIT RECORD

BIT #	SIZE	MAKE	TYPE	DEPTH OUT	FEET CUT	HOURS	AVG FT/HR
1A	17 1/2	REED		111	111	4 1/2	24.7
2A	12 1/4	REED	YS3	667	556	16	34.75
3A	12 1/4	SECURITY	HS51	1583	916	32 1/2	28.2
4A	12 1/4	REED	FP-52	2170	583	19 3/4	29.5
5	7 7/8	REED	HS51J	4305	2135	50 1/4	42.5
6	7 7/8	SMITH	F-3	5055	750	59	12.7
7	7 7/8	REED	FP53	5170	115	11 3/4	9.8
8 DIA CORE	7 7/8	HCC	R.M. FLASH	5229	59	14 1/4	4.2
9	7 7/8	REED	FP53	5560	331	30	11.0

DEVIATION RECORD

DATE	DEPTH	DEGREES
7/24/82	111'	1 1/4°
7/25/82	340'	1 3/4°
7/25/82	537'	1°
7/25/82	667'	1 3/4°
7/25/82	788'	1°
7/26/82	994'	1 1/2°
7/26/82	1311'	1°
7/27/82	1583'	1 1/2°
7/29/82	2770'	1 1/4°
7/30/82	3256'	1°
7/30/82	3714'	1°
7/31/82	4235'	1 1/2°
7/31/82	4305'	1 1/2°
8/2/82	4801'	1 1/2°
8/3/82	5046'	3/4°
8/4/82	5170'	3/4°

FORMATION TOPS
KB = 5026 Ft.

FORMATION	SAMPLE TOPS	E-LOG TOP	SUBSEA
Pennsylvanian			
Hermosa	4060	4075	+951
Upper Ismay	5135	5113	-87
Lower Ismay	5322	5295	-269
Gothic Shale	5378	5347	-321
Desert Creek	5396	5369	-343
Lower Desert Creek	5441	5431	-405
Chimney Rock	5490	5485	-459
T.D.	5560	5550	-524

E-LOG COMPARISONS

FORMATION	Raymond T. Duncan #1-23 Branford Canyon Fed. NE SW Sec. 23 37S, 24E G.L. 5011' K.B. 5026' SUBSEA DEPTH	Tricentral #1-3 Nancy Fed. NE NW Sec. 3 38S, 25E G.L. 5388' K.B. 5403' SUBSEA DEPTH	Wexpro Patterson Unit #2 NE SW Sec. 32 37S, 25E G.L. 5343' K.B. 5365' SUBSEA DEPTH
Pennsylvanian			
Hermosa	+951		
Upper Ismay	-87	-56	-157
Lower Ismay	-269	-245	-347
Gothic Shale	-321	-299	-395
Desert Creek	-343	-317	-418
Lower Desert Creek	-405	-375	-470
Chimney Rock	-459	-417	-487
T.D.	-524	-435	-545

LOG CALCULATIONS

FORMATION	DEPTH	ØN	ØD	ØS	AVE Ø	$\frac{1}{F(\emptyset^2)}$	Rt	$\frac{Rt}{Rwa(F)}$	Rw	Ro (FRw)	Sw (%)
Ismay	5181	.085	0.0	.10	.06	277.77	30	.108	.03	8.33	53%
	5185	.13	.035	.115	.09	123.5	10	.081	.03	3.71	61%
	5193	.11	.025	.12	.085	138.4	10	.072	.03	4.15	64%
	5203	.135	.12	.17	.14	51.0	20	.392	.03	1.53	28%
	5209	.13	.11	.165	.135	54.9	30	.546	.03	1.65	23%
	5222	.29	.14	.20	.21	22.7	4.5	.198	.03	.68	39%
	5237	.13	.05	.16	.11	82.6	12	.145	.03	2.48	46%
Lower Ismay	5338	.11	.065	.11	.095	110.8	22	.199	.03	3.32	39%
Desert Creek	5380	.17	.10	.15	.14	51.0	12	.235	.035	1.79	39%
	5405	.13	.025	.10	.055	330.6	15	.045	.035	11.57	88%
	5410	.14	.06	.13	.11	82.6	15	.182	.035	2.89	44%
Lower Desert Creek	5433	.30	.28	.23	.27	13.7	11	.802	.035	.48	21%
	5437	.15	.125	.22	.165	36.7	14	.382	.035	1.29	30%
	5444	.28	.22	.27	.25	16.0	9	.563	.035	.56	25%
	5449	.21	.24	.21	.22	20.7	3.7	.179	.035	.73	44%
	5452	.105	.055	.19	.115	75.6	10	.132	.035	2.65	52%

DRILL STEM TEST DATA

Drill Stem Test #1 (5179' - 5229') 50 Ft. Test Upper Ismay

TYPE: Bottom Hole Conventional with no cushion

FLOWS:

IF - 15 minutes - open with strong blow 20 lb. in 5 minutes (1/8" CH), gas to surface in 8 minutes with 15 lb. (3/4" CH), remained at 15 lb. at 15 minutes.

ISI - 30 minutes - action slowly died.

FF - 60 minutes - open with strong blow 6 lb. in 4 minutes (1/2" CH), 5 lb. in 40 minutes (1/4" CH), 8 lb. in 50 minutes (1/8" CH), 18 lb. in 60 minutes (1/8" CH), maximum 10 MCF/day.

FSI - 120 minutes - action slowly died.

RECORDER FIELD PRESSURES:

	Inside	Outside
Location (depth)	5157	5185
IH	3023	3112
IF	140-177	238-266
ISI	1838	1908
FF	177-257	248-322
FSI	2239	2328
FH	3013	3065
Bottom Hole Temperature	130°F	132°F

RECOVERY:

Drill Pipe:
135' (.66 Barrels) gas cut mud
366' (1.79 Barrels) oil and gas cut mud
122' (.59 Barrels) mud, oil, gas cut water
623' Total

Sample Chamber:
1.21 cu ft gas
40 cc oil
780 cc water
820 cc Total at 250 PSI

RESISTIVITIES:

Drill Pipe:

Top — gas cut mud; 0.3 at 92°F, 33,000 PPM CHL

Middle — oil and gas cut mud; 0.24 at 98°F, 86,000 PPM CHL

Bottom — mud, oil, gas cut water; 0.08 at 99°F, 140,000 PPM CHL

Sample Chamber:

Water; 0.03 at 110°F, 144,000 PPM CHL

Pit Mud; 0.33 at 82°F

Pit Mud Filtrate; 0.19 at 82°F, 28,000 PPM CHL

OBSERVATIONS AND COMMENTS:

DST #1 was a successful test, the packers set and held, no mechanical failure was indicated on the test tool, no fluid was lost down hole, and the packers pulled loose easily.

The results of this Drill Stem Test on the Ismay indicate a possible oil and water contact was tested. A fair amount of salt water was recovered with some oil. The pressure charts indicate a tight, (fair to good porosity with low poor permeability) zone. It is recommended that this zone be further studied and analyzed, the oil - water contact located and a well can be completed. It is expressed by this geologist, that the salt water entering the test tool applied enough cushion to hold back the oil in the tight, poor permeable zones to flow into the tool. There just wasn't enough of a gas drive for the oil to flow. The best porosity and permeability appear to be at the bottom of the zone allowing the water to enter the test tool and hold back the oil.

OBSERVATIONS AND COMMENTS:

DST #2 was a successful test, the packers set and no fluid was lost down hole. No mechanical failure was indicated on the test tool. The packers pulled loose easily and no problems were encountered while tripping out and dismantling the test tool.

As a result of this Drill Stem Test, the Desert Creek at this location appears to have great potential for making a good oil and gas well. Even though the pressure charts indicate low permeability, the zone exhibits good to excellent porosity. Sufficient amounts of oil and gas, with no mud and no water recovered gives this zone excellent potential to make an oil and gas well.

LITHOLOGY

3800-3860	Sandstone - clear white to light pink, predominantly unconsolidated quartz grains, very fine grained to fine grained, subangular to subrounded, calcareous, predominantly well sorted, no stain, no cut with Siltstone - orange, red, brown, soft calcareous.
3860-3880	Siltstone - red, orange, scattered dark brown, calcareous, soft, scattered slightly sandy traces of scattered light to medium gray, silty, microsucrosic Limestone.
3880-3900	Siltstone - light gray to medium gray, scattered red, orange, limy, soft interbedded Limestone - medium gray, silty, microsucrosic soft, scattered Sandstone - white, clear, light gray, very fine grained, subangular to subrounded, calcareous to slightly limy.
3900-3910	Shale - orange, red, calcareous to limy in part, soft, silty.
3910-3920	Sandstone - light gray, white, clear, quartz grains, very fine grained scattered fine grained, predominantly unconsolidated, subangular to subrounded, calcareous, moderately sorted.
3920-4020	Shale - red, orange, scattered brown, silty to sandy in part, soft, non-calcareous to scattered slightly calcareous. Interbedded Siltstone - red, orange to gray, soft, calcareous to limy in part, scattered slightly sandy in part, slightly anhydritic in part. Scattered Sandstone - light gray to white, very fine grained, moderately sorted, calcareous to limy in part.
4020-4050	Sandstone - light gray white to clear, very fine grained to fine grained, scattered unconsolidated quartz grains, subangular to subrounded, calcareous, moderately sorted interbedded with Siltstone - light to medium gray red, calcareous to limy.
4050-4100	Limestone - light to medium gray, light brown, microsucrosic, soft, silty in part, no visible porosity, no stain, interbedded Shale - red, orange, brown, soft, silty, calcareous in part. Siltstone - red, orange, lavender, soft, anhydritic in part.

4100-4160	Shale - red, orange, brick red, gray, brown, soft, silty in part. Siltstone - red, orange, soft to moderately firm, calcareous, limy in part. Limestone - light to medium gray, scattered light brown, cryptosucrosic to microsucrosic, dense, slightly anhydritic in part.
4160-4180	Limestone - light brown, light gray, medium gray cream, cryptosucrosic to microsucrosic, dense, anhydritic in part, interbedded with red Siltstones and Shales.
4180-4200	Shale - brick red, orange, soft, silty in part, interbedded Limestone - light gray, light brown, microsucrosic to cryptosucrosic, anhydritic.
4200-4260	Limestone - light to medium gray, light to medium brown, cryptosucrosic to microsucrosic, dense, anhydritic, interbedded red, orange, brown Shale and Siltstone. Scattered Sandstone - light gray, gray, white, fine grained, subangular, moderately sorted, micaceous.
4260-4270	Shale - red, orange, brown, soft, silty in part with Limestone - light brown to brown, scattered gray, microsucrosic, dense, no visible porosity, no stain. Interbedded Siltstone - red, gray, moderately firm, slightly sandy in part, slightly calcareous to calcareous.
4270-4310	Limestone - predominantly medium gray, scattered light gray cream, microsucrosic to sucrosic, dense, no visible porosity, no stain, no fluorescence, no cut. Interbedded reddish brown Siltstone and Shale. Scattered Sandstone - light to medium gray, fine grained to medium grained, subangular, poor to moderately sorted, slightly calcareous, no fluorescence or cut.
4310-4340	Shale - dark gray, scattered reddish brown, platy, soft, slightly calcareous, slightly carbonaceous in part.
4340-4380	Limestone - medium to dark brown cream, light to medium gray, microsucrosic to cryptosucrosic, dense, slightly anhydritic, no porosity, no fluorescence or cut. Interbedded Shale - medium to dark gray dark brown, platy in part, soft, slightly calcareous, scattered slightly carbonaceous in part.

4380-4410	Shale - medium to dark gray, scattered brown, platy in part, slightly calcareous, soft, interbedded scattered Limestone - cream, light gray, scattered medium gray, light brown, predominantly cryptosucrosic to microsucrosic, dense, anhydritic in part.
4410-4440	Limestone - light brown, gray cream, scattered medium gray, cryptosucrosic to scattered microsucrosic, dense, scattered slightly anhydritic in part, no porosity, no stain, no cut, trace of scattered fossils.
4440-4460	Limestone - predominantly medium to dark gray scattered light brownish gray, cryptosucrosic to microsucrosic, dense, traces of argillaceous with Shale - dark gray, dark brown, platy, soft, slightly calcareous.
4460-4510	Limestone - white, light gray, light greenish-gray, silty to sandy, hard, dense, no visible porosity, no stain, micaceous in part, interbedded with light to medium gray, microsucrosic, hard, dense, Limestone. Traces of Anhydrite.
4510-4540	Shale - medium to dark gray, dark brown, scattered red, platy in part, slightly calcareous to limy in part, trace of micaceous, scattered silty in part. Interbedded with Limestone - gray, brown, predominantly cryptosucrosic, dense.
4540-4550	Sandstone - light gray, white, glauconitic, subangular, poor to moderately sorted, calcareous, clay filled, micaceous in part.
4550-4630	Shale - light to medium gray, brown to red, blocky to platy in part, soft, slightly calcareous to scattered limy in part, silty, traces of scattered carbonaceous in part. Interbedded Limestone - predominantly medium brown to light brownish-gray, cryptosucrosic to slightly microsucrosic, dense, traces of fossils (oolitic), slightly anhydritic.
4630-4650	Limestone - cream, white, light to medium brown, predominantly cryptosucrosic to traces of scattered fragmental, dense, anhydritic in part, argillaceous in part, no porosity, no fluorescence, no cut, no stain.
4650-4680	Shale - dark gray to medium gray, platy in part, calcareous to limy in part, moderately firm, silty, anhydritic in part.

4680-4700	Limestone - white, light green, light gray, sucrosic to sandy in part, dense, hard, no visible porosity. Interbedded Shale - dark gray, medium gray, brown, platy in part, calcareous to limy.
4700-4720	Shale - black to dark gray, platy to fissile, soft, carbonaceous, slightly calcareous to non-calcareous.
4720-4740	Limestone - white, cream, light brown, microsucrosic to cryptosucrosic, dense, anhydritic in part, argillaceous in part, no porosity. Interbedded Shale - medium to dark gray, dark brown, scattered platy, silty in part, calcareous to traces of scattered limy.
4740-4760	Limestone - predominantly light brown, cream, scattered medium brown, microsucrosic to scattered traces of fragmental, dense, soft, slightly anhydritic, scattered argillaceous in part, cherty.
4760-4790	Limestone - light brown, cream, cryptosucrosic to microsucrosic, dense, slightly anhydritic, cherty.
4790-4810	Shale - brownish gray, medium gray, platy in part, slightly calcareous to scattered limy in part, cherty. Interbedded Limestone - light brownish gray, cryptosucrosic to slightly fragmental, dense, no visible porosity, slightly anhydritic in part, cherty, dolomitic in part.
4810-4820	Shale - black, dark gray, platy, fissile, soft, carbonaceous in part, predominantly non-calcareous.
4820-4840	Limestone - light to medium gray, predominantly microsucrosic, dense, slightly argillaceous in part, scattered slightly anhydritic in part, slightly silty in part.
4840-4880	Shale - medium gray, scattered black, scattered brown, silty in part, blocky to platy in part, slightly calcareous to traces of limy in part, carbonaceous in part with interbedded Limestone - light to medium gray, microsucrosic, silty to slightly shaly in part, dense.
4880-4920	Limestone - light gray, cream, microsucrosic, argillaceous in part, scattered anhydritic, dense, soft with Shale - black, medium to dark gray, platy in part, slightly calcareous, carbonaceous in part.

4920-4930	Shale - dark gray to black, scattered dark brown, platy to blocky, scattered fissile, soft, slightly calcareous to non-calcareous, slightly carbonaceous in part.
4930-4960	Shale - light to medium gray, scattered dark brownish red, blocky to platy in part, soft, calcareous to slightly calcareous, trace of scattered silty in part with interbedded Limestone - light gray, white, cream, scattered light to medium gray, predominantly microsucrosic to scattered cryptosucrosic, dense, argillaceous in part, scattered Anhydrite in part, no visible porosity, no stain, no fluorescence, no cut.
4960-4970	Shale - black to dark gray, scattered medium gray, platy to splintery, soft, slightly calcareous to non-calcareous, slightly carbonaceous in part.
4970-5000	Limestone - light to medium gray, cream, microsucrosic to slightly sucrosic in part, scattered cryptosucrosic, argillaceous, anhydritic in part, dense, no porosity, with interbedded Shale - medium to dark gray, brown, scattered reddish brown, blocky to scattered platy, slightly calcareous to calcareous, soft.
5000-5020	Limestone - light to medium gray, light brown, brownish gray, cryptosucrosic to microsucrosic, scattered argillaceous in part, dense, no visible porosity. Interbedded Shale - predominantly dark gray to black, platy to blocky, soft to scattered slightly moderately firm, calcareous to slightly calcareous, silty in part.
5020-5040	Shale - dark gray to black, scattered brown, platy in part, soft to moderately firm, slightly calcareous to non-calcareous, with interbedded Limestone - medium gray, scattered medium brown, microsucrosic, dense, slightly anhydritic in part, dolomitic in part.
5040-5060	Limestone - light to medium gray, cream, light brown, predominantly microsucrosic to scattered cryptosucrosic, dense, slightly argillaceous in part, scattered anhydritic. Interbedded dark gray Shale.
5060-5080	Limestone - cream, light gray, light brown, microsucrosic, dense, slightly argillaceous in part, no visible porosity, no stain, with interbedded Shale - medium to dark gray scattered black, dark brown, slightly calcareous to scattered slightly limy in part.

5080-5100	Shale - predominantly black to dark gray, scattered medium gray, platy in part, soft to moderately firm, slightly calcareous, scattered non-calcareous, slightly carbonaceous in part, scattered silty in part, with Limestone - medium grayish brown, microsucrosic, dense, slightly anhydritic in part, slightly dolomitic.
5100-5130	Shale - medium gray, medium brown, black, platy to blocky, soft, predominantly non-calcareous to slightly calcareous, waxy to very slightly silty in part.
5130-5140	Limestone - light to medium gray, microsucrosic, dense, scattered slightly anhydritic, no visible porosity, no stain, no cut, traces of scattered white Anhydrite.
5140-5160	Shale - medium gray, scattered black, splintery to scattered platy, slightly calcareous to calcareous, soft to moderately firm, slightly silty in part, waxy in part, scattered traces of carbonaceous with Limestone - light gray, medium gray, microsucrosic, dense, anhydritic in part, argillaceous in part, no visible porosity, with white soft Anhydrite.
5160-5190	Anhydrite - white, soft, light gray, scattered medium gray with interbedded Limestone - light to medium grayish brown, microsucrosic, dense, anhydritic, no visible porosity.
5190-5200	Limestone - brown, grayish brown, dense, hard, dolomitic in part, slightly anhydritic, no visible porosity, no stain to traces of slightly brown stain, traces of slight light yellow fluorescence, no cut, with interbedded Shale - black, dark gray, soft carbonaceous in part, platy, traces scattered white Anhydrite.
5200-5210	Limestone - light brown, light to medium gray, microsucrosic, anhydritic in part, dense, none to trace small scattered vugs, scattered light brown stain, scattered bright yellow fluorescence with scattered good bleeding cut.
5210-5230	Limestone - light to medium brown, light gray, grayish brown, cryptosucrosic to microsucrosic, abundant small to scattered large (1/2" - 1/4") vugs, abundant dark brown to black oil stain, abundant bright yellow fluorescence and good bleeding yellow cut, slightly anhydritic in part, abundant crystalline lined vugs.
5230-5250	Limestone - light grayish brown, light to medium brown, microsucrosic, soft, dense, anhydritic in part, no visible porosity, traces of scattered black stain, scattered very light yellow fluorescence, no cut.

5250-5290	Limestone - light gray, white, cream, light brown, microsucrosic to cryptosucrosic, dense, anhydritic, scattered slightly argillaceous, scattered slightly shaly in part, no visible porosity, no stain, scattered mineral fluorescence, no cut.
5290-5300	Limestone - light to dark brown, grayish brown, microsucrosic, dense, anhydritic, slightly argillaceous in part, no visible porosity, no stain, scattered light yellow mineral fluorescence, traces of slight very faint light yellow cut.
5300-5320	Limestone - light to medium gray, microsucrosic to cryptosucrosic, dense, anhydritic in part, no visible porosity, none to traces black stain, traces scattered light yellow fluorescence, trace of very faint light yellow standing cut.
5320-5350	Limestone - light to dark gray, microsucrosic, dense, anhydritic, slightly shaly in part, no visible porosity, no stain, no cut.
5350-5370	Anhydrite - white, light to medium gray, soft, scattered Limestone - light brown, light to medium gray, microsucrosic, dense, anhydritic, no visible porosity, no stain.
5370-5380	Limestone - medium to dark gray, microsucrosic, dense, anhydritic, no visible porosity, no hydrocarbon fluorescence, traces of scattered mineral fluorescence, no cut.
5380-5400	Shale - black, dark gray, platy to blocky, soft, calcareous to very calcareous, silty in part.
5400-5410	Anhydrite - white, light gray, soft.
5410-5430	Dolomite - medium to dark brown, dense, microsucrosic, hard, no visible porosity, no visible porosity, no stain, no fluorescence, no cut.
5430-5440	Anhydrite - white, light gray, soft.
5440-5460	Dolomite - medium to dark brown, microsucrosic to slightly sucrosic, good visible pinpoint porosity to small vugs, abundant dark brown scattered black oil stain, abundant greenish-yellow fluorescence, scattered bright yellow fluorescence, abundant bright yellowish-blue streaming cut.

5460-5470	Dolomite - medium brown, light tan, microsucrosic to slightly sucrosic, scattered pinpoint porosity to traces of scattered small vugs, scattered dark brown stain with yellow fluorescence and good bleeding cut.
5470-5480	Shale - black, dark gray, blocky to platy, soft, calcareous, slightly carbonaceous in part.
5480-5490	Dolomite - light gray, very light brown, micro-sucrosic, dense, no visible porosity, anhydritic in part, limy in part, no stain, good mineral fluorescence, no cut.
5490-5510	Shale - medium gray to light gray, blocky to platy, calcareous to dolomitic, moderately firm to hard to scattered soft, anhydritic in part, with interbedded Dolomite - light gray, light brownish-gray, microsucrosic to scattered sucrosic, dense, anhydritic, no visible porosity, no stain, slightly limy in part, shaly in part, argillaceous.
5510-5530	Anhydrite - light gray, white, soft.
5530-5560	Gypsum - clear to scattered light gray, trace of white, crystalline, scattered Selenite crystals.

CORE ANALYSIS

CORE #1 Upper Ismay 5170' - 5229'

5170-5179	Anhydrite - light to dark gray, white, light brown, very light blue, dense, soft to moderately firm, trace of scattered light brown Limestone.
5179-5181	Limestone - light to medium gray, brown, grayish-brown, microsucrosic, dense, anhydritic in part, interbedded with black carbonaceous Shale.
5181-5182	Limestone - medium brown, scattered gray, microsucrosic, dense, anhydritic, hard, no visible porosity.
5182-5189	Anhydrite - white, light gray, dense, soft, trace of scattered light brown to brown Limestone.
5189-5190	Shale - black, dark gray, brownish-black, soft, micaceous, carbonaceous in part, slightly calcareous to calcareous, dolomitic in part.
5190-5194	Limestone - brown, gray, grayish-brown, dense, hard, slightly anhydritic, no visible porosity, slight brown stain, no cut, none to trace of fluorescence, traces of scattered white Anhydrite, dolomitic in part.
5194-5195	Shale - black, dark gray, soft, carbonaceous in part, trace of slight calcareous, platy, trace scattered white Anhydrite, light yellow fluorescence with slight light yellow cut.
5195-5198	Limestone - gray, brown, microsucrosic, dense, anhydritic in part, no visible porosity, no stain, trace of fluorescence, no cut, hard, traces of scattered fossils, dolomitic.
5198-5199	Limestone - medium gray, grayish-brown, cryptosucrosic to slightly microsucrosic, dense, anhydritic, no visible porosity, no stain, scattered traces of fossils, hard.
5199-5202	Limestone - medium to dark gray, hard, dense, anhydritic, cryptosucrosic to microsucrosic, no porosity, abundant Anhydrite.

5202-5204	Limestone - light brown, grayish-brown, microsucrosic, anhydritic inclusions, no visible porosity, no stain, hard, dense, trace scattered fossils.
5204-5207	Limestone - light to medium gray, light brownish-gray, microsucrosic, anhydritic inclusions, hard, dense, no visible porosity, no stain.
5207-5210	Limestone - medium gray, light to medium brown, microsucrosic, scattered Anhydrite, hard, dense, traces to scattered small vugs, light brown oil stain with bright yellow fluorescence and good bleeding cut.
5210-5224	Limestone - light to medium brown, light gray, grayish-brown, cryptosucrosic to microsucrosic, abundant small to scattered large vugs, (1/4" to 1/2"), abundant dark brown to black oil stain, bright yellow fluorescence and good bleeding cut, slightly anhydritic in part, scattered Anhydrite crystals.
5224-5226	Limestone - light to medium gray, light brownish-gray, predominantly microsucrosic to crypto-sucrosic, Anhydrite in part, trace of black to dark brown oil stain, very faint light yellow fluorescence, very poor visible porosity.
5226-5227	Limestone - predominantly medium gray to scattered dark gray, brownish-gray, predominantly crypto-sucrosic to slightly microsucrosic, dense, hard, anhydritic inclusions, no visible porosity, no stain, no cut.
5227-5229	Limestone - light brownish-gray, cryptosucrosic to microsucrosic, dense, hard, anhydritic in part, no visible porosity, no stain, no fluorescence, no cut.

SHOW ANALYSIS

ISMAY (5207' - 5227')

While coring the Upper Ismay, a porous zone was encountered. A drilling break indicated porosity; 20-25 minutes before, 5-8 minutes during, 10 minutes after. Total gas, during the drilling of this zone, peaked at 88 units at 5218 feet, other peaks were 18 units at 5212 feet, 38 units at 5214 feet. Examining the core revealed a zone containing numerous vugs of various sizes ranging from pinpoint to 1/4 inch to 1/2 inch, a few larger than 3/4 inch vugs were noted. The presence of oil in the zone was noted by examining the core under the microscope and ultra-violet light. During the Drill Stem Test of this zone gas reached the surface in 8 minutes and peaked at 10 MCG/day. A small amount of oil was recovered in the sample chamber. A larger amount of salt water was recovered. Significant trip gas, 2688 units, after resuming drilling operations prompted raising the mud weight from 10.4 lbs. to 11.3 to 11.5 lbs., indicating sufficient gas under pressure in this zone.

DESERT CREEK (5441' - 5460')

The Lower Desert Creek drilled at less than 1 minute per foot to 2.5 minutes per foot, compared to 7-9 minutes before and 4-5 minutes after. This fast drilling rate indicated good porosity and this good porosity was varified after examining the samples. Good to excellent dolomitic porosity was noted with abundant amounts of oil. Background gas increased from 4 total units to well over 300 units while penetrating the zone. Total gas peaked at 416 units with 12288C_1, 5120C_2, 2048C_3, 256IC_4, 320NC_4, at 5456 feet. Mud weight was at 11.2 lbs. and was built up to 13.4 lbs. to hold the gas.

We drill stem tested this zone and recovered 770 ft. (4.003 barrels), of 45° API gravity oil at 71°F. No mud and no water was recovered. Gas peaked at 212.9 MCF/day flow. A large amount of trip gas, 9920 units was noted.

FINAL ANALYSIS

The Raymond T. Duncan, Bradford Canyon, Federal #1-23 was drilled to a total depth of 5550 feet into the Paradox Evaporites Formation. This wildcat was drilled to explore a seismic high and to see if a build-up existed in the Ismay and Desert Creek members of the Paradox Formation. The well was drilled with no major problems in engineering or geological. The crews of Coleman Rig #3 performed very satisfactory and efficiently. The crew of Mudloggers from Tooke, also did a commendable job.

In evaluating the zones penetrated at this location it is apparent that the medium to dark brown dolomites of the Lower Desert Creek have excellent potential to make an oil and gas well. Good to excellent porosity with abundant oil shows and significant gas makes this zone look promising. With good completion procedures the Lower Desert Creek will make a well.

The Ismay zone (5207' - 5227') has good to excellent porosity and permeability at the bottom and moderate to fair porosity and permeability at the top. We probably encountered the oil-water contact in our core and test. The oil existing at the lower porosity and permeability at the top of the zone and the water at the bottom with good porosity and permeability. By properly completing only the upper few feet of this zone, may make the Ismay a small producer of oil and gas with some water.

CORE ANALYSIS ABBREVIATIONS
5170' - 5229', Cut 59' -
Recovered 59' - Upper Ismay

5170-5179	ANHY - lt to dk gy, wh, lt brn, v lt blue, dns, sft to mod frm, tr scat lt brn LS.
5179-5181	LS - lt to m gy, brn, gy-brn, micsuc, dns, anhy in pt, intbd w blk carb SH.
5181-5182	LS - m brn, scat gy, micsuc, dns, anhy, hd, no visible porosity.
5182-5189	ANHY - wh, lt gy, dns, sft, tr scat lt brn to brn LS.
5189-5190	SH - blk, dk gy, brn-blk, sft, mica, carb in pt, sl calc to calc, dol in pt.
5190-5194	LS - brn, gy, gy-brn, dns, hd, sl anhy, no vis por, sl brn stn, no cut, no to tr flor, tr scat wh anhy, sl dol in pt.
5194-5195	SH - blk, dk gy, sft, carb in pt, tr sl calc, plty, tr scat wh anhy, lt yel flor, w sl lt yel cut.
5195-5198	LS - gy, brn, micsuc, dns, anhy in pt, no vis por, no stn, tr flor, no cut, hd, tr scat fos, dol in pt.
5198-5199	LS - m gy, gy-brn, crpsuc to sl micsuc, dns, anhy, no vis por, no stn, scat tr fos, hd.
5199-5202	LS - m to dk gy, hd, dns, anhy, crpsuc to micsuc, no por, abnt anhy.
5202-5204	LS - lt brn, gy-brn, micsuc, anhy incl, no vis por, no stn, hd, dns, tr scat fos.
5204-5207	LS - lt to m gy, lt brn-gy, micsuc, anhy incl, hd, dns, no vis por, no stn.
5207-5210	LS - m gy, lt to m brn, micsuc, scat anhy, hd, dns, tr to scat sm vugs, lt brn stn w bri yel flor and gd bld cut.
5210-5224	LS - lt to m brn, lt gy, gy-brn, crpsuc to micsuc, abnt sm to scat lrg vugs, abnt dk brn to blk oil stn, w bri yel flor and good bld cut, sl anhy in pt, scat anhy xln.
5224-5226	LS - lt to m gy, lt brn-gy, pred micsuc to crpsuc, anhy in pt, tr blk to dk brn oil stn, v fnt lt yel flor, v p vis por, dns.
5226-5227	LS - pred m gy to scat dk gy, brn-gy, pred crpsuc to sl micsuc, dns, hd, anhy incl, no vis por, no stn, no cut.
5227-5229	LS - lt brn-gy, crpsuc to micsuc, dns, hd, anhy in pt, no vis por, no stn, no flor, no cut.

LITHOLOGY ABBREVIATIONS

3800-3860	SS - clr wh to pink, Qtz gr, pred uncon, v f gr, subang to subrnd, calc, pred w srtd, no stn, n cut. SLTST - orng, rd, brn, calc, sft.
3860-3880	SLTST - rd, orng, scat dk brn, calc, sft, scat sl sdy, tr scat lt to m gy, slty, micsuc LS.
3880-3900	SLTST - lt gy to m gy, scat red, orng, lmy, sft, intbd LS - m gy, slty, micsuc, sft, scat SS - wh, clr, lt gy, v fgr, subang to subrnd, calc to sl lmy.
3900-3910	SH - orng, rd, calc to lmy in pt, sft, slty.
3910-3920	SS - lt gy, wh, clr, Qtz gr, v f gr, scat fgr, pred uncon, subang to subrnd, calc, mod srtd.
3920-4020	SH - rd, orng, scat brn, slty to sdy in pt, sft, non calc to scat sl calc, intb SLTST - rd, orng to gy, sft, calc to limy in pt, scat sl sdy in pt, sl anhy in pt, scat SS - lt gy to wk, v f gr, mod srtd, calc to lmy in pt.
4020-4050	SS - lt gy, wh to clr, v f gr to fgr, scat uncon Qtz gr, subang to subrnd, calc, mod srtd intbd w SLTST - lt to m gy, rd, calc to lmy.
4050-4100	LS - lt to m gy, lt brn, micsuc, sft, slty in pt, no vis por, no stn, intbd SH - rd, orng, brn, sft, slty, calc in pt, SLTST - rd, orng, lav, sft, anhy in pt.
4100-4160	SH - rd, orng, brick rd, gy, brn, sft, slty in pt, SLTST - rd, orng, sft to mod frm, calc, lmy in pt, LS - lt to m gy, scat lt brn, crpsuc to micsuc, dns, sl anhy in pt.
4160-4180	LS - lt brn, lt gy, m gy, crm, crpsuc to micsuc, dns, anhy in pt, intbd w rd SLTST and SH.
4180-4200	SH - brick rd, orng, sft, slty in pt, intbd LS - lt gy, wh, lt brn, micsuc to crpsuc, anhy.
4200-4260	LS - lt to m gy, lt to m brn, crpsuc to micsuc, dns, anhy, cmtbd rd. prmg. brm. SH and SLTST, scat SS - lt gy, gy, wh, f gr, subang, mod srtd, mica.
4260-4270	SH - rd, orng, brn, sft, slty in pt, w LS - lt brn to brn, scat gy, micsuc, dns, no vis por, no stn, intbd SLTST - rd, gy, mod frm, sl sdy in pt, sl calc to calc.
4270-4310	LS - pred m gy, scat lt gy, crm, misuc to suc, dns, no vis por, no stn, no flor, no cut, intd rd, brn, SLTST and SH, scat SS - lt to m gy f gr to m gr subang, p to mod srtd, sl calc, nfoc.
4310-4340	SH - dk gy, scat red, brn, plty, sft, sl calc, sl carb in pt.
4340-4380	LS - m to dk brn, crm, lt to m gy, micsuc to crpsuc, dns, sl anhy, no por nfoc, intbd SH - m to dk gy, dk brn, plty in pt, sft, sl calc, scat sl carb in pt.
4380-4410	SH - m to dk gy, scat brn, plty in pt, sl calc, sft, intbd scat LS - crm, lt gy, scat m gy, lt brn, pred crpsuc to micsuc, dns, anhy in pt.
4410-4440	LS - lt brn, gy, crm, scat m gy, crpsuc to scat micsuc, dns, scat sl anhy in pt, no por, no stn, no cut, tr scat fos.
4440-4460	LS - pred m to dk gy, scat lt brn-gy, crpsuc to micsuc, dns, tr arg w SH - dk gy, dk brn, plty, sft, sl calc.
4460-4510	LS - wh, lt gy, lt gn-gy, slty to sdy, hd, dns, no vis por, no stn, mica in pt, intbd w lt to m gy, micsuc, hd, dns, ls, tr anhy.
4510-4540	SH - m to dk gy, dk brn, scat rd, plty in pt, sl calc to lmy in pt, tr mica, scat slty in pt, intbd LS - gy, brn, pred crpsuc, dns.
4540-4550	SS - lt gy, wh, glau, subang, p to mod srtd, calc, cly fill, mica in pt.
4550-4630	SH - lt to m gy, brn to rd, blky to plty in pt, sft, sl calc to scat lmy in pt, slty, tr scat carb in pt, intbd LS - pred m brn to lt brn-gy, crpsuc to sl micsuc, dns, tr fos, sl anhy.

4630-4650	LS - crm, wh, lt to m brn, pred crpsuc to tr scat frag, dns, anhy in pt, arg in pt, no por, nfoc, no stn.
4650-4680	SH - dk gy to m gy, plty in pt, calc to lmy in pt, mod frm, slty, anhy in pt.
4680-4700	LS - wh, lt gn, lt gy, suc to sdy in pt, dns, hd, no vis por, intbd SH - dk gy, m gy, brn, plty in pt, calc to lmy.
4700-4720	SH - blk to dk gy, plty fis, sft, carb, sl calc to non calc.
4720-4740	LS - wh, crm, lt brn, micsuc to crpsuc, dns, anhy in pt, arg in pt, no por, intbd SH - m to dk gy, dk grn, scat plty, slty in pt, calc to tr scat lmy.
4740-4760	LS - pred lt brn, crm, scat m brn, micsuc to scat tr frag, dns, sft, sl anhy, scat arg in pt, chty.
4760-4790	LS - lt brn, crm, crpsuc to micsuc, dns, sl anhy, chty.
4790-4810	SH - brn, gy, m gy, plty in pt, sl calc to scat lmy in pt, chty, intbd LS - lt brn-gy, crpsuc to sl frag, dns, no vis por, sl anhy in pt, chty, dol in pt.
4810-4820	SH - blk, dk gy, plty, fis, sft, carb in pt, pred non calc.
4820-4840	LS - lt to m gy, pred micsuc, dns, sl arg in pt, scat sl anhy in pt, sl slty in pt.
4840-4880	SH - m gy, scat blk, scat brn, slty in pt, blky to plty in pt, sl calc to tr lmy in pt, carb in pt, intbd LS - lt to m gy, micsuc, slty to sl shly in pt, dns.
4880-4920	LS - lt gy, crm, micsuc, arg in pt, scat anhy, dns, sft w SH - blk, m to dk gy, plty in pt, sl calc, carb in pt.
4920-4930	SH - dk gy to blk, scat dk brn, plty to blky, scat fis, sft, sl calc to noncalc, sl carb in pt.
4930-4960	SH - lt to m gy, scat dk brn, rd, blky to plty in pt, sft, calc to sl calc, tr scat slty in pt, w intbd LS - lt gy, wh, crm, scat lt to m gy, pred micsuc to scat crpsuc, dns, arg in pt, scat anhy in pt, no vis por, no stn, nfoc.
4960-4970	SH - blk to dk gy, scat m gy, plty to splty, sft, sl calc to non calc, sl carb in pt.
4970-5000	LS - lt to m gy, crm, micsuc to sl suc in pt, scat crpsuc, arg, anhy in pt, dns, no por w/intb SH - m to dk gy, brn, scat rd-brn, blky to scat plty, sl calc to calc, sft.
5000-5020	LS - lt to m gy, lt brn, brn-gy, crpsuc to micsuc, scat arg in pt, dns, no por, intbd SH - pred dk gy to blk, plty to blky, sft to scat sl mod frm, calc to sl calc, slty in pt.
5020-5040	SH - dk gy to blk, scat brn, plty in pt, sft to mod frm, sl calc to non calc w intbd LS - m gy, scat m brn, micsuc, dns, sl anhy in pt, dol in pt.
5040-5060	LS - lt to m gy crm, lt brn, pred micsuc to scat crpsuc, dns, sl arg in pt, scat anhy, intbd dk gy sh.
5060-5080	LS - crm, lt gy, lt brn, micsuc, dns, sl arg in pt, no vis por, no stn w/intbd SH - m to dk gy, scat blk, dk brn, sl calc to scat sl lmy in pt.
5080-5100	SH - pred blk to dk gy, scat m gy, plty in pt, sft to mod frm, sl calc scat non calc, sl carb in pt, scat slty in pt, w LS - m gy, brn, micsuc, dns, sl anhy in pt, sl dol in pt.
5100-5130	SH - m gy, m brn, blk, plty to blky, sft, pred non calc to sl calc, wxy to v sl slty in pt.
5130-5140	LS - lt to m gy, micsuc, dns, scat sl anhy, no vis por, no stn, no cut, tr scat wh anhy.
5140-5160	SH - m gy, scat blk, gy, splty to scat plty, sl calc to calc, sft to mod frm, sl slty in pt, wxy in pt, scat tr carb w LS - lt gy, m gy, micsuc, dns, anhy in pt, arg in pt, no por w/wh, sft anhy.
5160-5190	ANHY - sft, wh, lt gy, scat m gy w intbd LS - lt to m gy brn, micsuc, dns, anhy, no vis por.

5190-5200 LS - brn, gy-brn, dns, hd, dol in pt, sl anhy, no vis por, no stn to tr sl brn stn, tr sl lt yel flor, no cut, w intbd SH - blk, dk gy, sft, carb in pt, plty, tr scat wh anhy.

5200-5210 LS - lt brn, lt to m gy, micsuc, anhy in pt, dns, no to tr sm scat vugs, scat lt brn stn, scat bri yel flor with scat gd bld cut.

5210-5230 LS - lt to m brn, lt gy, gy-brn, crpsuc to micsuc, abnt sm to scat lrg (1/2" - 1/4") vugs, abnt dk brn to blk oil stn, abnt bri yel flor and gd bld cut, sl anhy in pt, abnt xln lined vugs.

5230-5250 LS - lt gy-brn, lt to m brn, micsuc, sft, dns, anhy in pt, no vis por, tr scat blk stn, scat v lt yel flor, no cut.

5250-5290 LS - lt gy, wh, crm, lt brn, micsuc to crpsuc, dns, anhy, scat sl arg, scat sl shly in pt, no vis por, no stn, scat mnrl flor, no cut.

5290-5300 LS - lt to dk brn, gy-brn, micsuc, dns, anhy, sl arg in pt, no vis por, no stn, scat lt yel mnrl flor, tr sl v fnt lt yel cut.

5300-5320 LS - lt to m gy, micsuc to crpsuc, dns, anhy in pt, no vis por, no to tr blk stn, tr scat lt yel flor, tr v fnt lt yel stnd cut.

5320-5350 LS - lt to dk gy, micsuc, dns, anhy, sl shly in pt, no vis por, no stn, no cut.

5350-5370 ANHY - wh, lt to m gy, sft, scat LS - lt brn, lt to m gy, micsuc, dns, anhy, no vis por, no stn.

5370-5380 LS - m to dk gy, micsuc, dns, anhy, no vis por, no H-C flor, tr scat mnrl flor, no cut.

5380-5400 SH - blk, dk gy, plty to blky, sft, calc to v calc, slty in pt.

5400-5410 ANHY - wh, lt gy, sft.

5410-5430 DOL - m to dk brn, dns, micsuc, hd, no vis por, no stn, no flor, no cut.

5430-5440 ANHY - wh, lt gy, sft.

5440-5460 DOL - m to dk brn, micsuc to sl suc, gd vis pinpt por to sm vugs, abnt dk brn, scat blk oil stn, abnt gn-yel flor, scat bri yel flor, abnt bri yel-blu strm cut.

5460-5470 DOL - m brn, lt tan, micsuc to sl suc, scat pinpt por to tr scat sm vugs, scat dk brn stn w yel flor and gd bld cut.

5470-5480 SH - blk, dk gy, blky to plty, sft, calc, sl carb in pt.

5480-5490 DOL - lt gy, v lt brn, micsuc, dns, no vis por, anhy in pt, lmy in pt, no stn, gd mnrl flor, no cut.

5490-5510 SH - m gy, lt gy, blky to plty, calc to dol, mod frm, hd to scat sft, anhy in pt, w intbd
DOL - lt gy, lt brn-gy, micsuc to scat suc, dns, anhy, no vis por, no stn, sl lmy in pt, shly in pt, arg.

5510-5530 ANHY - lt gy, wh, sft.

5530-5560 GYP - clr to scat lt gy, tr wh, xln, scat sel xls.

JS-165

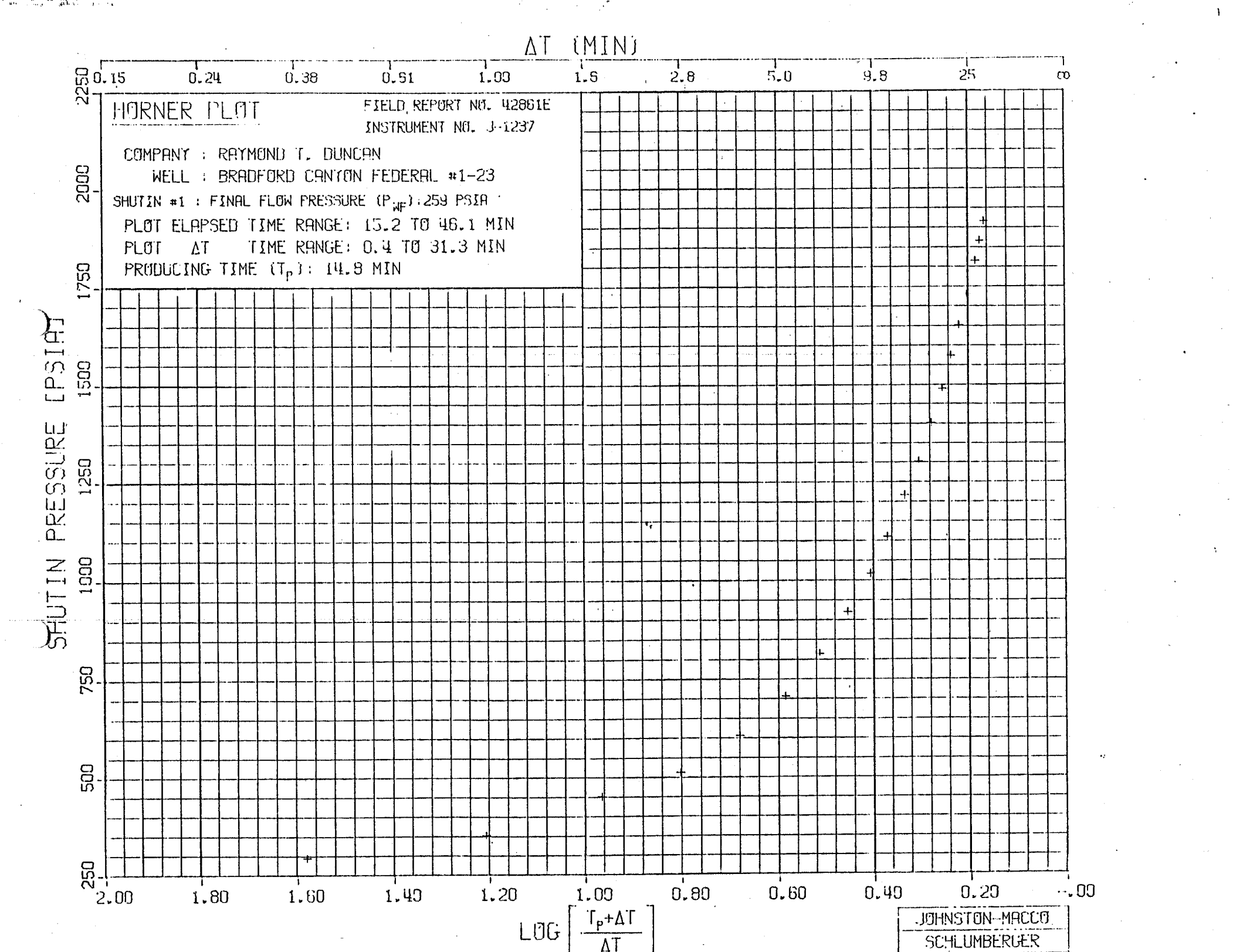
JOHNSTON

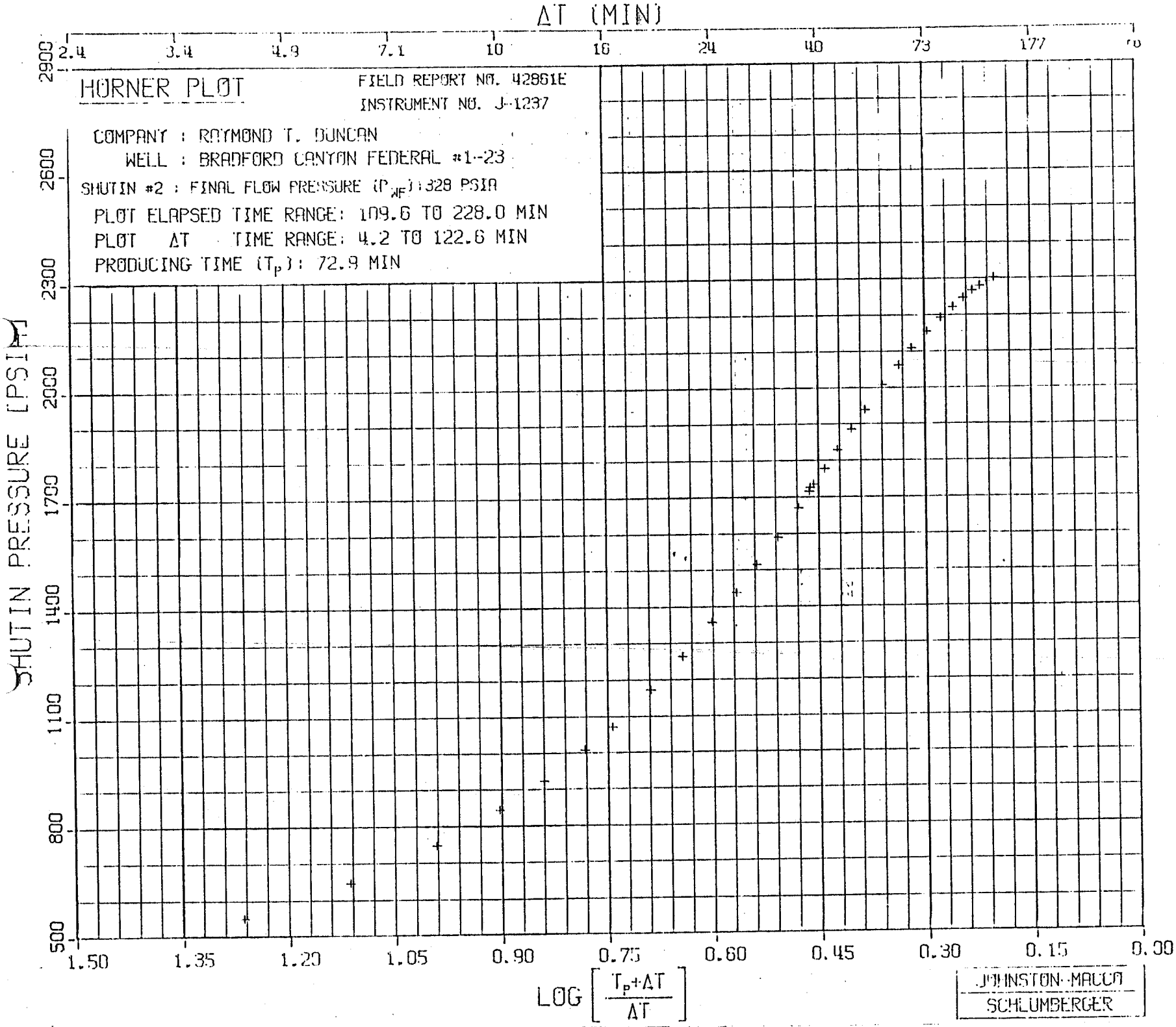
Schlumberger

computerized data analysis

COMPANY RAYMOND T. DUNCAN WELL BRADFORD CANYON FEDERAL #1-23 TEST NO. 1 COUNTY SAN JUAN STATE UTAH

FIELD REPORT #42861 E

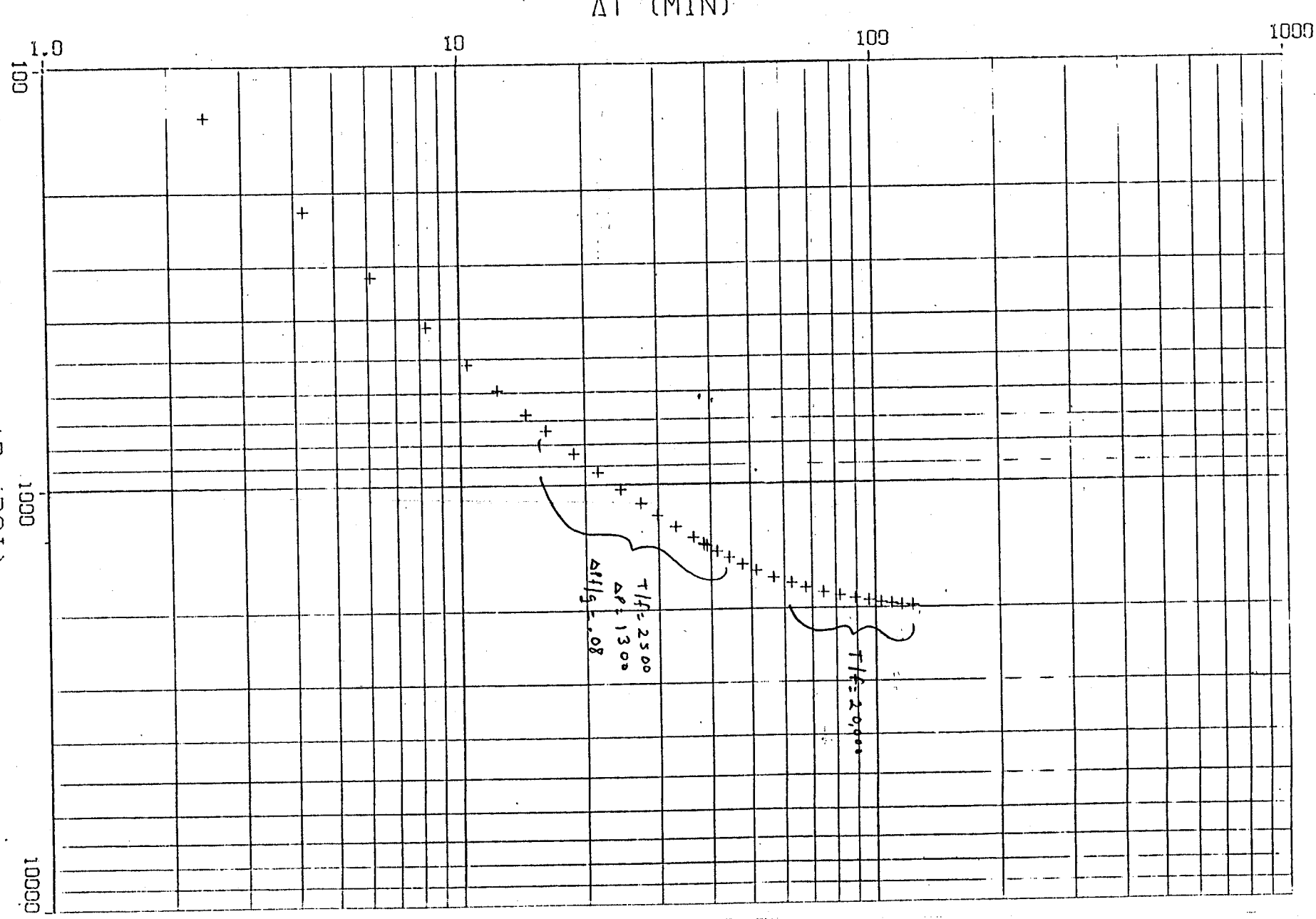

ΔT (MIN)
0.15
0.24
0.38
0.51
1.00
1.6
2.8
5.0
9.8
25
∞
HORNER PLOT
FIELD REPORT NO. 42861E
INSTRUMENT NO. J-1237
COMPANY : RAYMOND T. DUNCAN
WELL : BRADFORD CANYON FEDERAL #1-23
SHUTIN #1 : FINAL FLOW PRESSURE (P_{WF}): 259 PSIA
PLOT ELAPSED TIME RANGE: 15.2 TO 46.1 MIN
PLOT ΔT TIME RANGE: 0.4 TO 31.3 MIN
PRODUCING TIME (T_p): 14.8 MIN
SHUTIN PRESSURE (PSIA)
2250
2000
1750
1500
1250
1000
750
500
250
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
.00
LOG $\frac{T_p+\Delta T}{\Delta T}$
JOHNSTON-MACCO
SCHLUMBERGER


ΔT (MIN)
2.4
3.4
4.9
7.1
10
16
24
40
73
177
HORNER PLOT
FIELD REPORT NO. 42861E
INSTRUMENT NO. J-1237
COMPANY : RAYMOND T. DUNCAN
WELL : BRADFORD CANYON FEDERAL #1-23
SHUTIN #2 : FINAL FLOW PRESSURE (P_{WF}) : 328 PSIA
PLOT ELAPSED TIME RANGE: 109.6 TO 228.0 MIN
PLOT ΔT TIME RANGE: 4.2 TO 122.6 MIN
PRODUCING TIME (T_p): 72.9 MIN
SHUTIN PRESSURE (PSIA)
2900
2600
2300
2000
1700
1400
1100
800
500
1.50
1.35
1.20
1.05
0.90
0.75
0.60
0.45
0.30
0.15
0.00
LOG $\left[\frac{T_p+\Delta T}{\Delta T}\right]$
JOHNSTON-MACCO
SCHLUMBERGER

LOG LOG PLOT

COMPANY : RAYMOND T. DUNCAN
WELL : BRADFORD CANYON FEDERAL #1-23
FIELD REPORT NO. 42861E
INSTRUMENT NO. J-1237

SHUTIN #2 :
FINAL FLOW PRESSURE (P_{WF}) : 328 PSIA
PLOT ELAPSED TIME RANGE: 107.9 TO 228.0 MIN
PLOT ΔT TIME RANGE: 2.4 TO 122.6 MIN



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TEST TICKET DATA PRINTOUT

WELL IDENTIFICATION

1.	WELL	: BRADFORD CANYON FEDERAL #1-23
2.	COMPANY	: RAYMOND T. DUNCAN
3.		: 1777 S. HARRISON
4.		: PENTHOUSE #1
5.		: DENVER, COLORADO 80210
6.		:
7.		:
8.	FIELD	: WILDCAT
9.	COUNTY	: SAN JUAN
10.	STATE/PROV.	: UTAH
11.	LOCATION	: SEC. 23, T37S R24E
12.	TECHNICIAN	: KOERNER (VERNAL)
13.	TEST APPROVED BY	: MR. J. BROWNING
14.	TEST DATE	: 08-06-82
15.	DEPTH REFERENCE	:
16.	DEPTH REFERENCE ELEVATION	: S.L. 5011. FT

HOLE INFORMATION

1. THE HOLE IS STRAIGHT.

2.	TOTAL DEPTH	: 5229. FT
3.	OPEN HOLE DIAMETER	: 7.87 IN

MUD INFORMATION

1.	MUD TYPE	: SALT-GEL-STARCH
2.	MUD WEIGHT	: 11.2 LB/GAL
3.	MUD VISCOSITY	: 38. MARSH FUNNEL SEC
4.	CORRECTED WATER LOSS	: 13.8 CC/30 MIN
5.	MUD RESISTIVITY	: 0.33 OHM-M
6.	MUD RES. MEAS. TEMP.	: 82.0 DEG F
7.	MUD FILTRATE RESISTIVITY	: 0.19 OHM-M
8.	MUD FILT. RES. MEAS. TEMP.	: 82.0 DEG F
9.	MUD CHLORIDES CONTENT	: 28000.0 PPM BY WEIGHT

****
* TEST TICKET DATA PRINTOUT *
****

TEST INFORMATION

1. FIELD REPORT NUMBER : 42861E
2. TEST TYPE : M.F.E. OPEN HOLE
3. TEST NUMBER : 1
4. TELEFLOW IN USE ? : NO
5. SSDR OR J-300 IN USE ? : NO
6. SPRO IN USE ? : NO
7. PTSDL IN USE ? : NO

TEST STRING INFORMATION

#	COMPONENT NAME	EFFECTIVE I.D. (IN)	EFFECTIVE O.D. (IN)	FLOW PATH LENGTH (FT)
1	DRILL PIPE	3.80	4.50	4391.
2	DRILL COLLARS	2.25	6.75	744.
3	TEST TOOL STRING	0.93	5.00	94.

TEST STRING PLACEMENT

1. TEST TYPE CODE 1 - ON BOTTOM
2. PACKER DEPTHS : 5174. FT & 5179. FT

TEST ZONE DESCRIPTION

FORMATION NAME	TOP (FT)	BOTTOM (FT)	PRODUCTION ZONE THICKNESS (FT)	POROSITY (%)
UPPER ISMAY			17.	10.

TEST CONDITIONS

1. BOTTOMHOLE CHOKE(S) EFF. INTERNAL DIA. : 0.93 IN

****
* TEST TICKET DATA PRINTOUT *
****

TEST TOOL SAMPLE CHAMBER RECOVERY DATA

SAMPLE PRESSURE : 250. PSIG
OIL GRAVITY : DEG. API @ DEG F
GAS/OIL RATIO : 4810. FT3/BBL
GAS/LIQUID RATIO : 235. FT3/BBL

SAMPLE CHAMBER CONTENTS

FLUID	VOLUME	RESISTIVITY	CHLORIDES
GAS	1.21 FT3		
OIL	40.0 CC		
WATER	780.0 CC	0.03 OHM-M @ 110.0 DEG F	144000. PPM
MUD	CC	OHM-M @ DEG F	
TOTAL LIQUID	820.0 CC		

RECOVERY INFORMATION

	DESCRIPTION	FEET	% OIL	% H2O	% OTH	API DEG.	API DEG.F	RESISTIVITY OHM-M	RESISTIVITY DEG.F	CHL PPM
1	GAS CUT MUD	135			100			0.30	92	33000.
2	OIL & GAS CUT MUD	366	1		99			0.24	98	86000.
3	MUD & OIL+GAS CUT WATER	122	1	90	9			0.08	99	140000.

SURFACE INFORMATION

	DESCRIPTION	TIME	PRESSURE	CHOKE SIZE
1	SET PACKER	0639	-	-
2	OPENED TOOL	0640	-	1/8"
3		0644	20	"
4	GAS TO SURFACE	0648	15	3/4"
5	CLOSED FOR INITIAL SHUT-IN	0656	-	"
6	FINISHED SHUT-IN	0726	-	"
7	RE-OPENED TOOL	0727	-	1/2"
8		0730	6	"
9		0747	0	"
10		0748	0	1/4"
11		0801	5	"
12		0809	7	"
13		0811	8	1/8"
14		0815	11	"

* TEST TICKET DATA PRINTOUT *

	DESCRIPTION	TIME	PRESSURE	CHOKE SIZE
15		0817	13	"
16		0821	15	"
17		0825	17	"
18	CLOSED FOR FINAL SHUT-IN	0828	18	"
19	FINISHED SHUT-IN	1028	-	"
20	PULLED PACKER LOOSE	1030	-	-

FIELD REPORT NO.: 42861 E

CAPACITY: 4700#

INSTRUMENT NO.: J-1237

NUMBER OF REPORTS: 14

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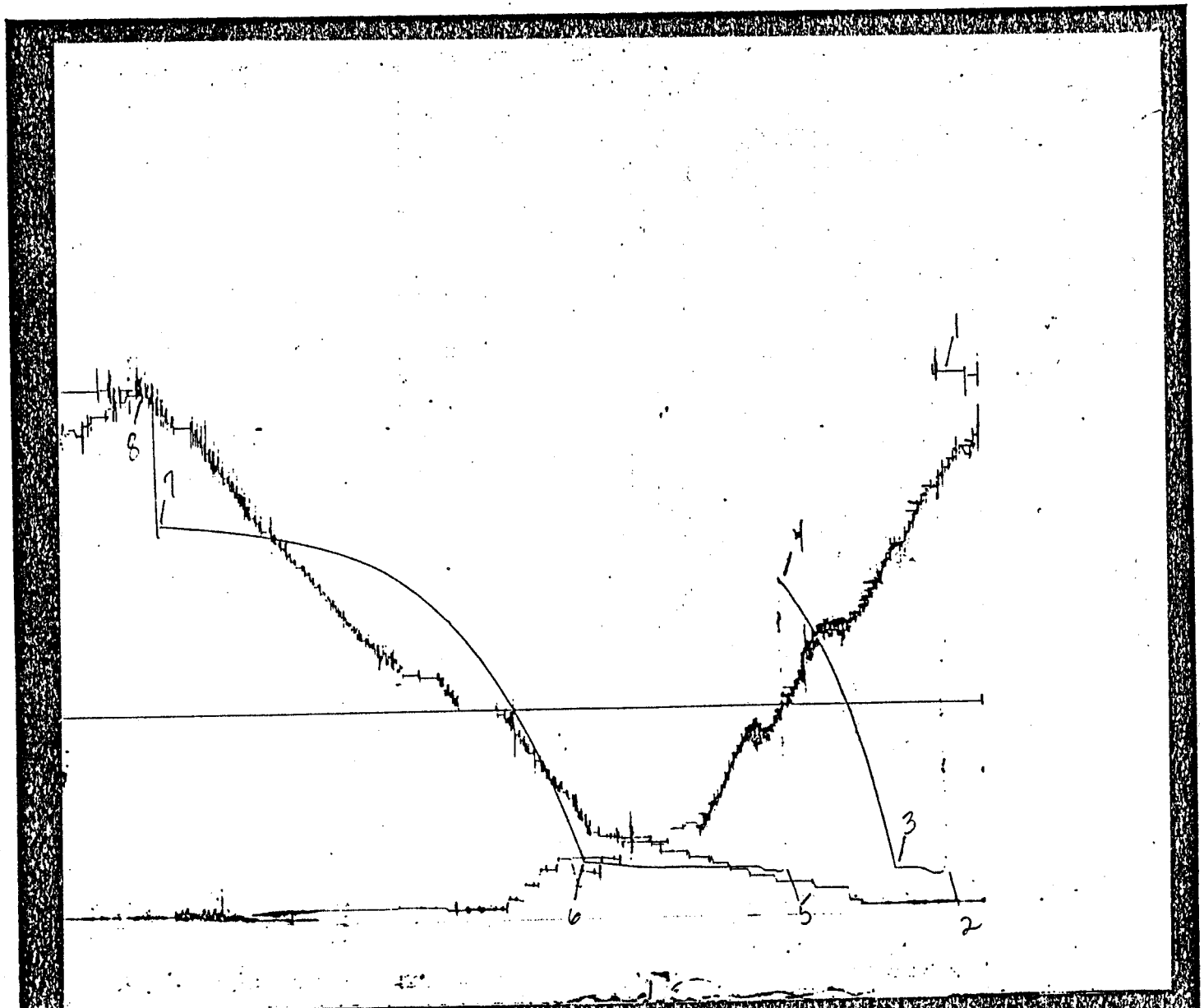
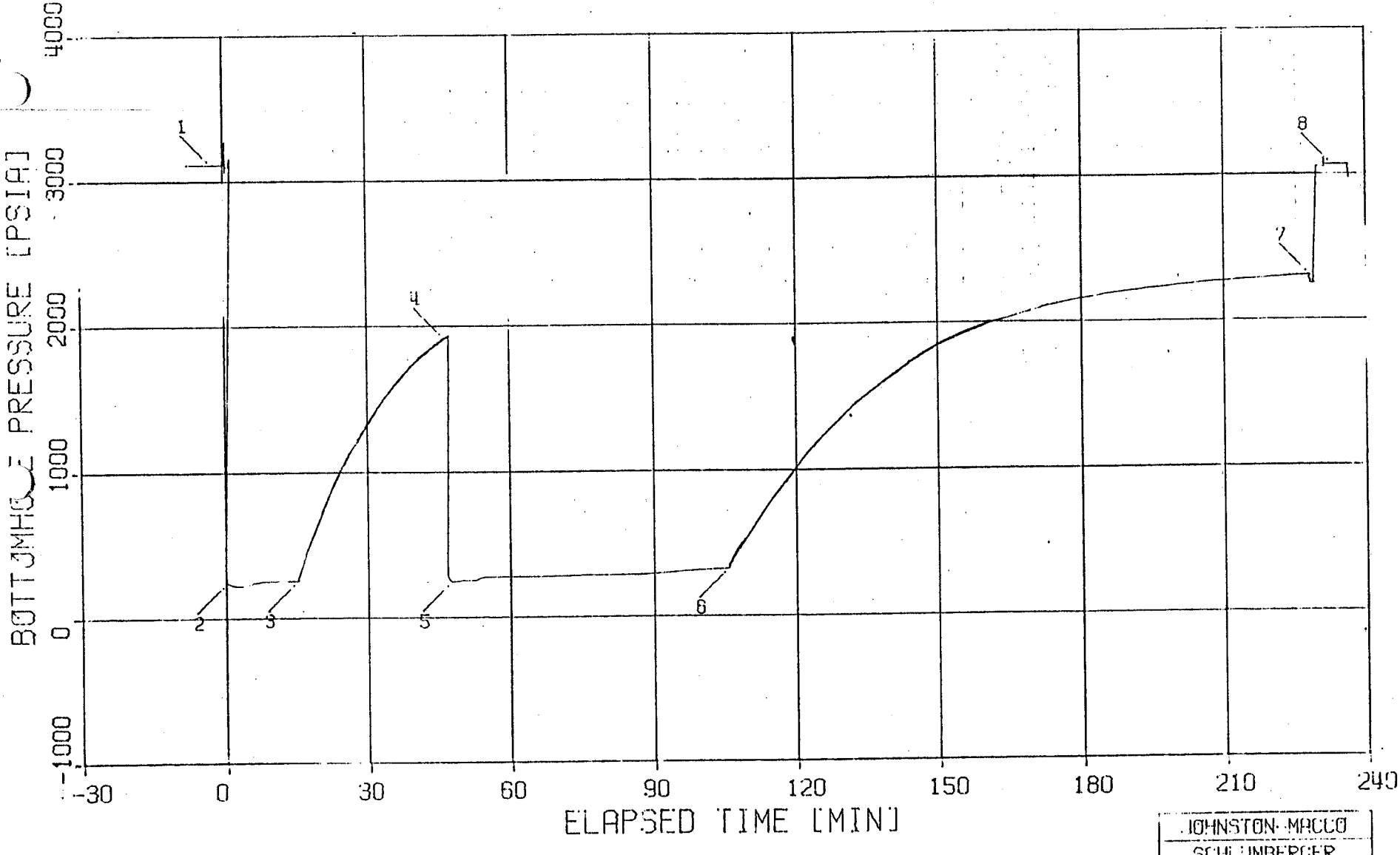


BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 42861E
INSTRUMENT NO. J-1237
DEPTH : 5185 FT
CAPACITY : 4700 PSI
PORT OPENING : OUTSIDE

COMPANY : RAYMOND T. DUNCAN
WELL : BRADFORD CANYON FEDERAL #1-23



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WELL TEST DATA PRINTOUT

FIELD REPORT # : 42861E

COMPANY : RAYMOND T. DUNCAN
WELL : BRADFORD CANYON FEDERAL #1-23

INSTRUMENT # : J-1237
CAPACITY [PSI] : 4700.
DEPTH [FT] : 5185.0
PORT OPENING : OUTSIDE
TEMPERATURE [DEG F] : 132.0

LABEL POINT INFORMATION

#	TIME OF DAY HH:MM:SS	DATE DD-MM	EXPLANATION	ELAPSED TIME,MIN	BOT HOLE PRESSURE PSIA
1	6:37:28	6-AU	HYDROSTATIC MUD	-2.54	3119
2	6:40: 0	6-AU	START FLOW	0.00	248
3	6:54:50	6-AU	END FLOW & START SHUT-IN	14.83	259
4	7:26: 5	6-AU	END SHUT-IN	46.08	1916
5	7:27:25	6-AU	START FLOW	47.42	250
6	8:25:27	6-AU	END FLOW & START SHUT-IN	105.45	328
7	10:28: 0	6-AU	END SHUT-IN	228.00	2305
8	10:32:48	6-AU	HYDROSTATIC MUD	232.80	3067

SUMMARY OF FLOW PERIODS

PERIOD	START ELAPSED TIME,MIN	END ELAPSED TIME,MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA
1	0.00	14.83	14.83	248	259
2	47.42	105.45	58.03	250	328

SUMMARY OF SHUTIN PERIODS

PERIOD	START ELAPSED TIME,MIN	END ELAPSED TIME,MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
1	14.83	46.08	31.25	259	1916	259	14.83
2	105.45	228.00	122.55	328	2305	328	72.86

TEST PHASE : FLOW PERIOD # 1

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA
6:40: 0	6-AU	0.00	0.00	248
6:45: 0	6-AU	5.00	5.00	237
6:50: 0	6-AU	10.00	10.00	258
6:54:50	6-AU	14.83	14.83	259

TEST PHASE : SHUTIN PERIOD # 1
FINAL FLOW PRESSURE [PSIA] = 259
PRODUCING TIME [MIN] = 14.83

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
6:54:50	6-AU	14.83	0.00	259	0	
6:55:50	6-AU	15.83	1.00	353	95	1.199
6:56:50	6-AU	16.83	2.00	463	- 205	0.925
6:57:50	6-AU	17.83	3.00	531	273	0.774
6:58:50	6-AU	18.83	4.00	613	355	0.673
6:59:50	6-AU	19.83	5.00	692	433	0.598
7: 0:50	6-AU	20.83	6.00	772	514	0.541
7: 1:50	6-AU	21.83	7.00	849	590	0.494
7: 2:50	6-AU	22.83	8.00	920	662	0.455
7: 3:50	6-AU	23.83	9.00	984	725	0.423
7: 4:50	6-AU	24.83	10.00	1048	789	0.395
7: 6:50	6-AU	26.83	12.00	1171	913	0.349
7: 8:50	6-AU	28.83	14.00	1276	1018	0.314
7:10:50	6-AU	30.83	16.00	1379	1121	0.285
7:12:50	6-AU	32.83	18.00	1471	1212	0.261
7:14:50	6-AU	34.83	20.00	1558	1299	0.241
7:16:50	6-AU	36.83	22.00	1636	1377	0.224
7:18:50	6-AU	38.83	24.00	1708	1449	0.209
7:20:50	6-AU	40.83	26.00	1768	1510	0.196
7:22:50	6-AU	42.83	28.00	1826	1567	0.185
7:24:50	6-AU	44.83	30.00	1884	1625	0.174
7:26: 5	6-AU	46.08	31.25	1916	1658	0.169

TEST PHASE : FLOW PERIOD # 2

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA
7:27:25	6-AU	47.42	0.00	250
7:32:25	6-AU	52.42	5.00	257
7:37:25	6-AU	57.42	10.00	282
7:42:25	6-AU	62.42	15.00	282
7:47:25	6-AU	67.42	20.00	282
7:52:25	6-AU	72.42	25.00	286
7:57:25	6-AU	77.42	30.00	288
8: 2:25	6-AU	82.42	35.00	288
8: 7:25	6-AU	87.42	40.00	291
8:12:25	6-AU	92.42	45.00	301
8:17:25	6-AU	97.42	50.00	312
8:22:25	6-AU	102.42	55.00	322
8:25:27	6-AU	105.45	58.03	328

TEST PHASE : SHUTIN PERIOD # 2
FINAL FLOW PRESSURE [PSIA] = 328
PRODUCING TIME [MIN] = 72.86

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
8:25:27	6-AU	105.45	0.00	328	0	
8:26:27	6-AU	106.45	1.00	385	57	1.868
8:27:27	6-AU	107.45	2.00	437	109	1.573
8:28:27	6-AU	108.45	3.00	488	161	1.403
8:29:27	6-AU	109.45	4.00	540	212	1.284
8:30:27	6-AU	110.45	5.00	591	264	1.192
8:31:27	6-AU	111.45	6.00	642	315	1.119
8:32:27	6-AU	112.45	7.00	689	361	1.057
8:33:27	6-AU	113.45	8.00	734	407	1.005
8:34:27	6-AU	114.45	9.00	780	452	0.959
8:35:27	6-AU	115.45	10.00	826	498	0.918
8:37:27	6-AU	117.45	12.00	910	582	0.850
8:39:27	6-AU	119.45	14.00	992	664	0.793
8:41:27	6-AU	121.45	16.00	1070	742	0.745
8:43:27	6-AU	123.45	18.00	1145	817	0.703
8:45:27	6-AU	125.45	20.00	1215	888	0.667
8:47:27	6-AU	127.45	22.00	1283	955	0.635
8:49:27	6-AU	129.45	24.00	1348	1021	0.606
8:51:27	6-AU	131.45	26.00	1407	1080	0.580
8:53:27	6-AU	133.45	28.00	1465	1138	0.557
8:55:27	6-AU	135.45	30.00	1522	1195	0.535
9: 0:27	6-AU	140.45	35.00	1643	1315	0.489
9: 5:27	6-AU	145.45	40.00	1755	1427	0.450
9:10:27	6-AU	150.45	45.00	1847	1519	0.418
9:15:27	6-AU	155.45	50.00	1925	1598	0.390

TEST PHASE : SHUTIN PERIOD # 2
FINAL FLOW PRESSURE [PSIA] = 328
PRODUCING TIME [MIN] = 72.86

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
9:20:27	6-AU	160.45	55.00	1993	1665	0.366
9:25:27	6-AU	165.45	60.00	2044	1716	0.345
9:30:27	6-AU	170.45	65.00	2090	1763	0.327
9:35:27	6-AU	175.45	70.00	2129	1802	0.310
9:40:27	6-AU	180.45	75.00	2161	1834	0.295
9:45:27	6-AU	185.45	80.00	2188	1860	0.281
9:50:27	6-AU	190.45	85.00	2210	1882	0.269
9:55:27	6-AU	195.45	90.00	2229	1901	0.258
10: 0:27	6-AU	200.45	95.00	2246	1919	0.247
10: 5:27	6-AU	205.45	100.00	2261	1933	0.238
10:10:27	6-AU	210.45	105.00	2274	1946	0.229
10:15:27	6-AU	215.45	110.00	2284	1957	0.221
10:20:27	6-AU	220.45	115.00	2294	1966	0.213
10:25:27	6-AU	225.45	120.00	2301	1974	0.206
10:28: 0	6-AU	228.00	122.55	2305	1977	0.203

RAYMOND T. DUNCAN

LEASE: BRADFORD CANYON FEDERAL

FIELD: (WILDCAT)

WELL NO: 1-23

TEST NO.: 2

TEST DATE: 08-08-82

FIELD REPORT NO.: 42862 E

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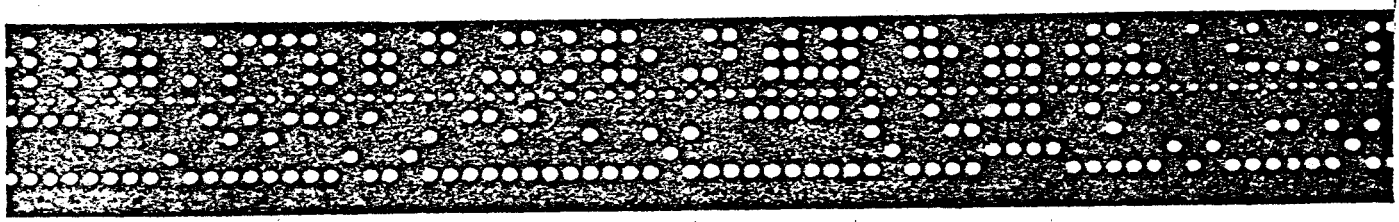
computerized data analysis



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Schlumberger

COMPUTERIZED DATA ANALYSIS

AUGUST 19, 1982

GENTLEMEN:

THE ENCLOSED TEST APPEARS TO BE A GOOD MECHANICAL DRILL STEM TEST DURING WHICH THE TOOLS DID FUNCTION PROPERLY. THE FORMATION PRODUCED ENOUGH RESERVOIR FLUID FOR PROPER IDENTIFICATION. RESERVOIR PRESSURE DRAWDOWN WAS SUFFICIENT AND AN ADEQUATE SHUT-IN BUILD-UP DID OCCUR FOR RELIABLE QUANTITATIVE ANALYSIS. AFTERFLOW WAS STILL IN EFFECT ON THE INITIAL SHUT-IN BUILD-UP TO THE EXTENT THAT THE PLOT IS CONSIDERED UNRELIABLE FOR ANALYSIS. RESERVOIR PARAMETERS WERE CALCULATED BY THE MCKINLEY METHOD.

1. FLOW RATE: A FLOW RATE OF 68 BBLS/DAY OF WATER AND TRACES OF OIL WAS NOTED DURING THIS TEST.

2. RESERVOIR PRESSURE: MECHANICAL STABILIZATION OF THE FINAL SHUT-IN PRESSURE BUILD-UP INDICATES A MAXIMUM RESERVOIR PRESSURE OF 2245 P.S.I.A. AT RECORDER DEPTH.

3. PERMEABILITY: THE CALCULATED TRANSMISSIBILITY FACTOR OF 59.76 MD.-FT./CP. INDICATES AN AVERAGE EFFECTIVE PERMEABILITY TO WATER OF 2.50 MD. FOR THE REPORTED 17 FOOT NET INTERVAL. THE CALCULATIONS WERE BASED ON A MCKINLEY SLOPE OF 185 P.S.I./LOG CYCLE OBTAINED FROM THE FINAL SHUT-IN BUILD-UP PLOT. IT WAS ASSUMED FOR THESE CALCULATIONS: (A) VISCOSITY .71 CP., (B) FORMATION VOLUME FACTOR 1.007 BBL/BBL. THESE FIGURES WERE OBTAINED FROM THE AVAILABLE TECHNICAL LITERATURE.

4. WELLBORE DAMAGE: THE CALCULATED DAMAGE RATIO OF 2.12 INDICATES THAT WELLBORE DAMAGE IS PRESENT AT THE TIME AND CONDITIONS OF THIS TEST. THE PRESSURE DROP DUE TO DAMAGE IS ESTIMATED TO BE 1013 P.S.I.

5 RADIUS OF INVESTIGATION: THE CALCULATED RADIUS OF INVESTIGATION OF THIS TEST IS 117 FEET BASED ON AN ASSUMED POROSITY OF 10%, COMPRESSIBILITY OF 3.25×10^{-6}, AND OTHER ASSUMPTIONS MADE IN NUMBER 3 ABOVE.

6. GENERAL COMMENTS: THE FORMATION EXHIBITS THE CHARACTERISTICS OF RELATIVELY GOOD PERMEABILITY EFFECTIVE TO THE RESERVOIR FLUID AND INDICATES THE PRESENCE OF WELLBORE DAMAGE.

Rebeca E. Nesselrode (DH)

REBECA E. NESSELRODE
DENVER RESERVOIR EVALUATION DEPARTMENT

RAYMOND T. DUNCAN
BRADFORD CANYON FEDERAL #1-23; SAN JUAN COUNTY
UTAH; SEC. 23 T37S R24E
5179' TO 5229'; TEST NO. 1

FIELD REPORT NO.: 42861 E

Reservoir Engineering Data

JOHNSTON

Recorder No. J-1237 Field Report No. 42861 E

Damage Ratio	DR	2.12		Effective Transmissibility. TO WATER	$\frac{Kh}{\mu B}$	59.76	$\frac{Md\text{-}ft.}{Cp.}$
Maximum Reservoir Pressure ESTIMATED	P_o	2245	P.S.I.G.	Effective Transmissability	$\frac{Kh}{\mu B}$	———	$\frac{Md\text{-}ft.}{Cp.}$
Slope of Shut-in Curve CALCULATED	M	185	PSI/log cycle	Flow Rate WATER	Q	68	Bbl./day
Potentiometric Surface (Datum Plane, Sea Level)	PS	5009	ft.	Pressure Gradient		———	PSI ft.
Productivity Index	PI	.035	Bbl./day/PSI	Gas Oil Ratio	GOR	———	CF/Bbl.
Radius of Investigation		117	ft.	K (Effective to WATER)		2.50	Md.

Assumptions made for Calculations for Liquid Recoveries

1. Q is averaged at a constant rate.
2. P_f is formation flowing pressure at a constant rate.
3. Formation flow is taken as single phase flow.
   If gas is produced at surface, phase separation is assumed to have occurred in drill pipe.
4. Radial flow is assumed.
5. For the purpose of calculating EDR where specific reservoir parameters are not available it is assumed that:

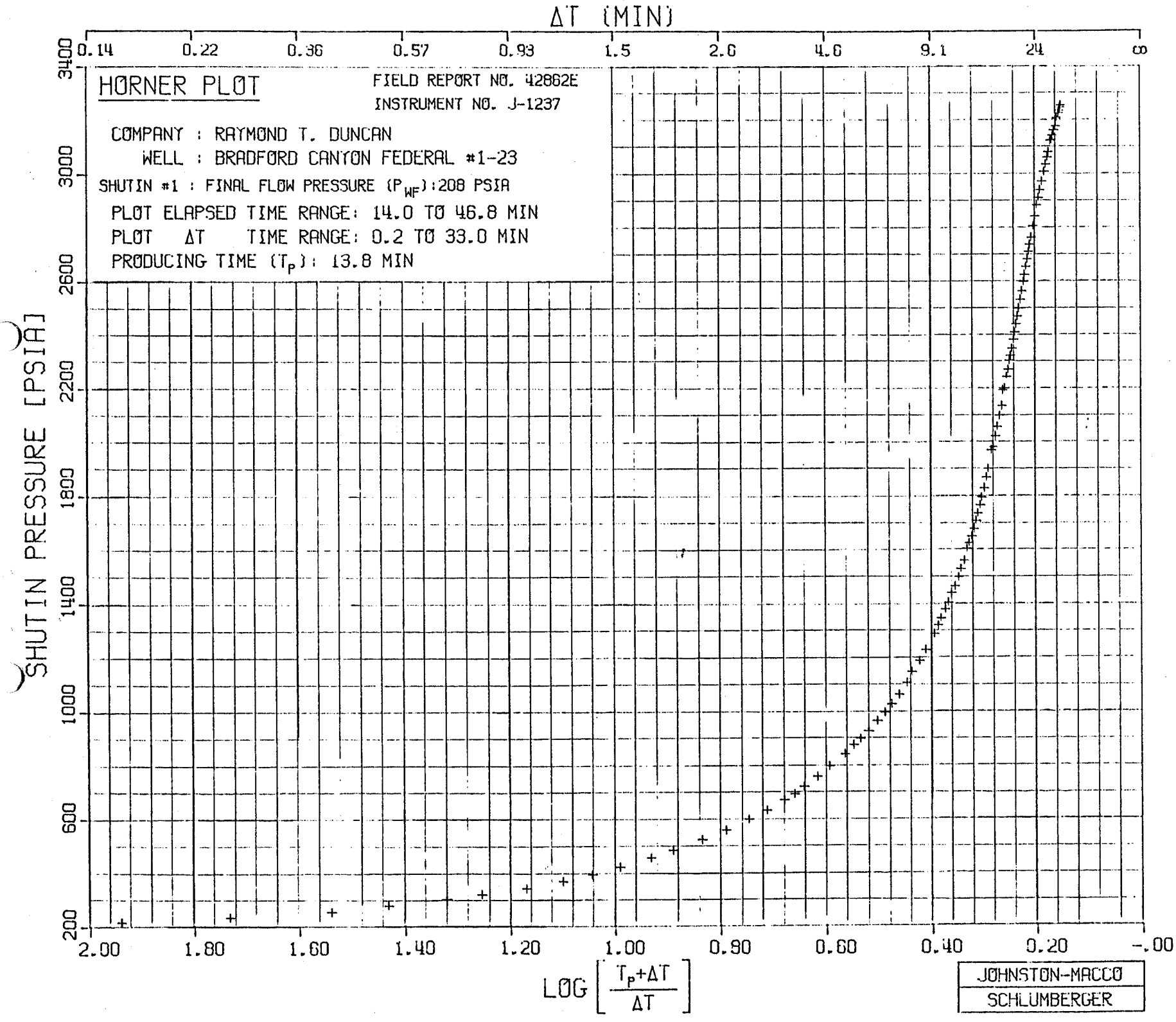
Effective permeability, K, will fall between	1 to 200 md
Formation porosity, ϕ, will fall between	0.1 to 0.3
Fluid compressibility, c, will fall between	10^{-6} to 10^{-5}
Fluid viscosity, μ, will fall between	0.05 to 50 cp.
Well bore radius, r_w, will fall between	$3\frac{7}{8}$" to $4\frac{3}{4}$"
Which gives an average value for the function $\log \frac{K}{\phi\mu c r_w^2}$ of	5.5

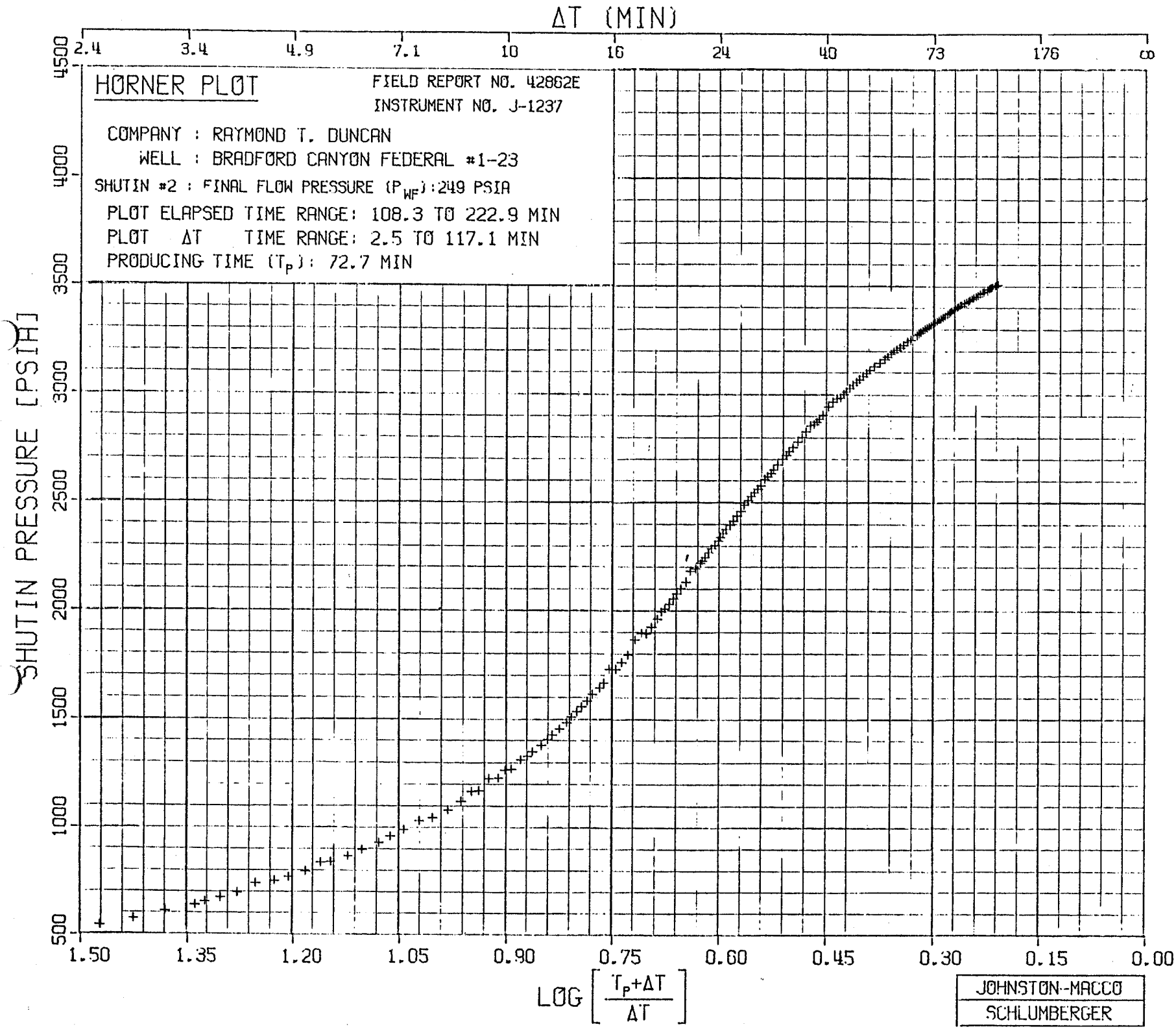
6. Other standard radial flow, equilibrium assumptions.

Empirical Equations:

1. $EDR = \frac{P_o - P_f}{M(\log T + 2.65)}$ where $M = \frac{P_1 - P_{10}}{\text{Log Cycle}}$
2. Transmissibility $\frac{Kh}{\mu\beta} = \frac{162.6\,Q}{M}$
3. DST $J = \frac{Q}{P_o - P_f}$ Theoretical $J = \frac{7.08 \times 10^{-1}\,Kh}{\mu\beta \ln(r_e/r_w)}$ Assumed $\ln(r_e/r_w) = 7.60$.
4. P.S. = [$P_o \times 2.309$ ft./PSI] − [Recorder depth to sea level.]
5. Radius of investigation, $r_i = \sqrt{\frac{Kt}{40\phi\mu c}}$ where t = time in days

In making any interpretation, our employees will give Customer the benefit of their best judgment as to the correct interpretation. Nevertheless, since all interpretations are opinions based on inferences from electrical, mechanical or other measurements, we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not be liable or responsible, except in the case of gross or wilful negligence on our part, for any loss, costs, damages or expenses incurred or sustained by Customer resulting from any interpretation made by any of our agents or employees.

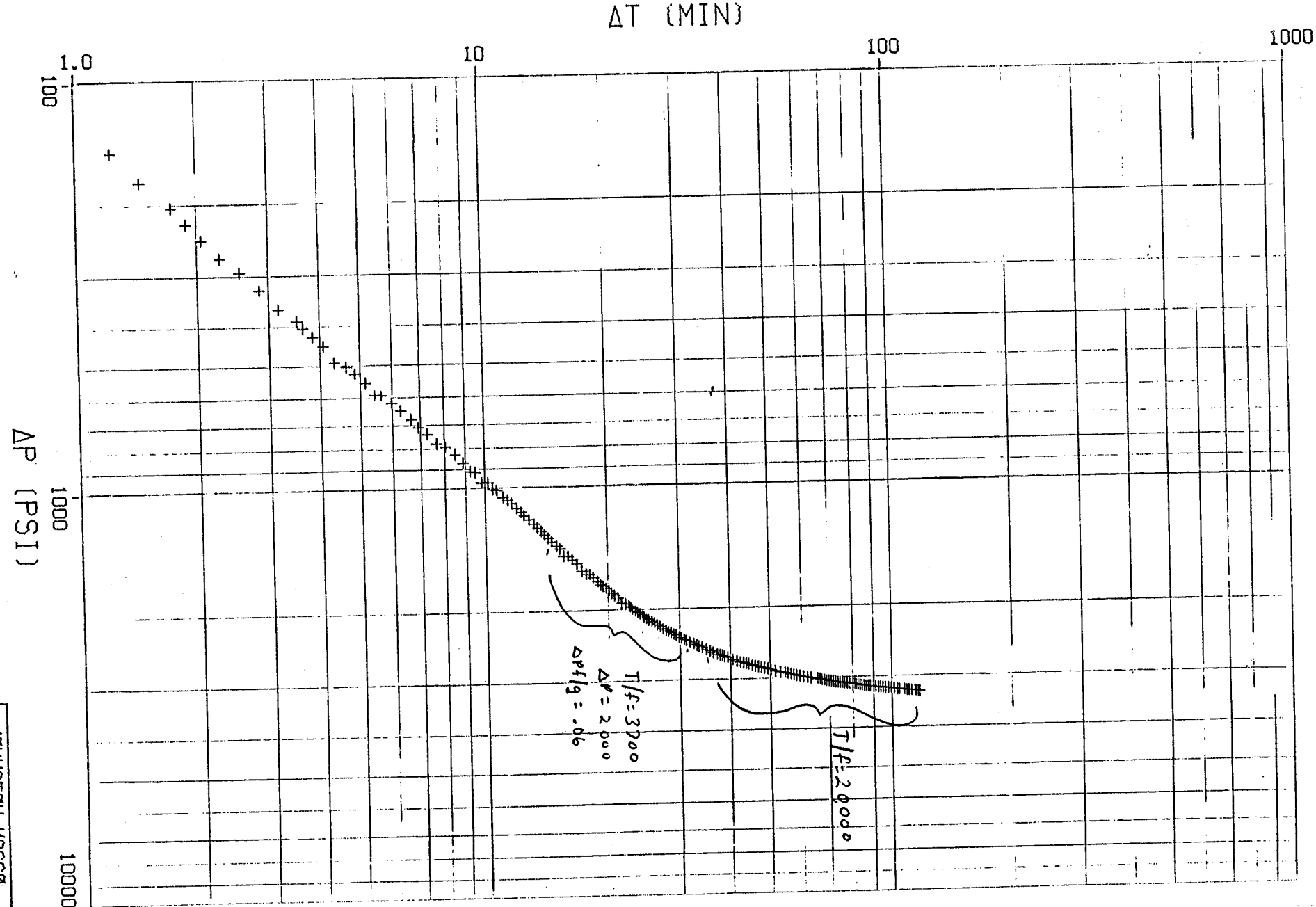

ΔT (MIN)
0.14
0.22
0.36
0.57
0.93
1.5
2.6
4.6
9.1
24
∞
HØRNER PLØT
FIELD REPØRT NØ. 42862E
INSTRUMENT NØ. J-1237
COMPANY : RAYMOND T. DUNCAN
WELL : BRADFØRD CANYØN FEDERAL #1-23
SHUTIN #1 : FINAL FLØW PRESSURE (P_{WF}):208 PSIA
PLØT ELAPSED TIME RANGE: 14.0 TØ 46.8 MIN
PLØT ΔT TIME RANGE: 0.2 TØ 33.0 MIN
PRØDUCING TIME (T_p): 13.8 MIN
SHUTIN PRESSURE [PSIA]
3400
3000
2600
2200
1800
1400
1000
600
200
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
-.00
LØG $\left[\frac{T_p+\Delta T}{\Delta T}\right]$
JØHNSTØN-MACCØ
SCHLUMBERGER


ΔT (MIN)
2.4
3.4
4.9
7.1
10
16
24
40
73
176
∞
HORNER PLOT
FIELD REPORT NO. 42862E
INSTRUMENT NO. J-1237
COMPANY : RAYMOND T. DUNCAN
WELL : BRADFORD CANYON FEDERAL #1-23
SHUTIN #2 : FINAL FLOW PRESSURE (P_{WF}) : 249 PSIA
PLOT ELAPSED TIME RANGE: 108.3 TO 222.9 MIN
PLOT ΔT TIME RANGE: 2.5 TO 117.1 MIN
PRODUCING TIME (T_p): 72.7 MIN
SHUTIN PRESSURE [PSIA]
4500
4000
3500
3000
2500
2000
1500
1000
500
1.50
1.35
1.20
1.05
0.90
0.75
0.60
0.45
0.30
0.15
0.00
LOG $\left[\frac{T_p+\Delta T}{\Delta T}\right]$
JOHNSTON-MACCO
SCHLUMBERGER

LOG LOG PLOT

COMPANY : RAYMOND T. DUNCAN
WELL : BRADFORD CANYON FEDERAL #1-23
FIELD REPORT NO. 42862E
INSTRUMENT NO. J-1237

SHUTIN #2 :
FINAL FLOW PRESSURE (P_{WF}): 249 PSIA
PLOT ELAPSED TIME RANGE: 107.0 TO 222.9 MIN
PLOT ΔT TIME RANGE: 1.2 TO 117.1 MIN



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PRODUCTION SYSTEM ANALYSIS

THE FOLLOWING FIGURES ARE SYSTEM SENSITIVITY ANALYSIS (NODAL^{SM}) PLOTS OF THE WELL AND THE CORRESPONDING VALUES USED TO GENERATE THEM. THE VALUES USED WERE TAKEN FROM THE DRILL STEM TEST ANALYSIS. THE TWO PLOTS SHOWN HAVE THE SAME PARAMETERS EXCEPT FOR THE CHANGE IN SKIN FACTOR AND TUBING NOTED ON THE HEADING.

ONE PLOT WAS GENERATED TO SHOW THE EFFECT OF DIFFERENT SHOT DENSITIES ON PRODUCTION. THE SHOT DENSITIES CONSIDERED WERE 1 SPF, 2 SPF, 4 SPF, AND 8 SPF, WITH SKIN DAMAGE REMOVED. THE INFLOW PERFORMANCE RELATIONSHIP (IPR) CURVE IS LABELED PWFS. IT REPRESENTS THE RELATIONSHIP BETWEEN BOTTOMHOLE FLOWING PRESSURE (PWF) AND THE FLOW RATE (Q) FOR THE RESERVOIR. THE CURVES LABELED WHP REPRESENT THE TUBING INTAKE CURVES FOR DIFFERENT WELLHEAD PRESSURES. THE INTERSECTION OF THESE CURVES REPRESENT THE PRODUCTION RATE ATTAINABLE ASSUMING NO PRESSURE DROP OCCURS ACROSS THE COMPLETION. PRESSURE DROP DOES OCCUR ACROSS PERFORATED COMPLETIONS, DUE TO CRUSHED ZONES SURROUNDING EACH PERFORATION TUNNEL. THE INTERSECTION OF THE HEAVY WHP CURVES (RESPONSE CURVES) AND THE DOTTED SPF CURVES GIVES THE ACTUAL PRODUCTION RATE WITH DIFFERENT SHOT DENSITIES AND WELLHEAD PRESSURES. FOR EXAMPLE, WITH 4 SPF AND A WELLHEAD PRESSURE OF 50 P.S.I.G., THE PRODUCTION RATE WOULD BE 33 BLPD.

THE PLOT WITH A SKIN FACTOR OF 3.17 SHOWS THAT THE WELL WILL NOT FLOW TO SURFACE.

ADDITIONAL NODAL ANALYSIS MAY BE GENERATED TO INVESTIGATE DIFFERENT FRACTURE LENGTHS, HIGHER SHOT DENSITIES, DIFFERENT TUBING SIZES, VARIOUS WELLHEAD PRESSURES, ETC., TO OPTIMIZE PRODUCTION.

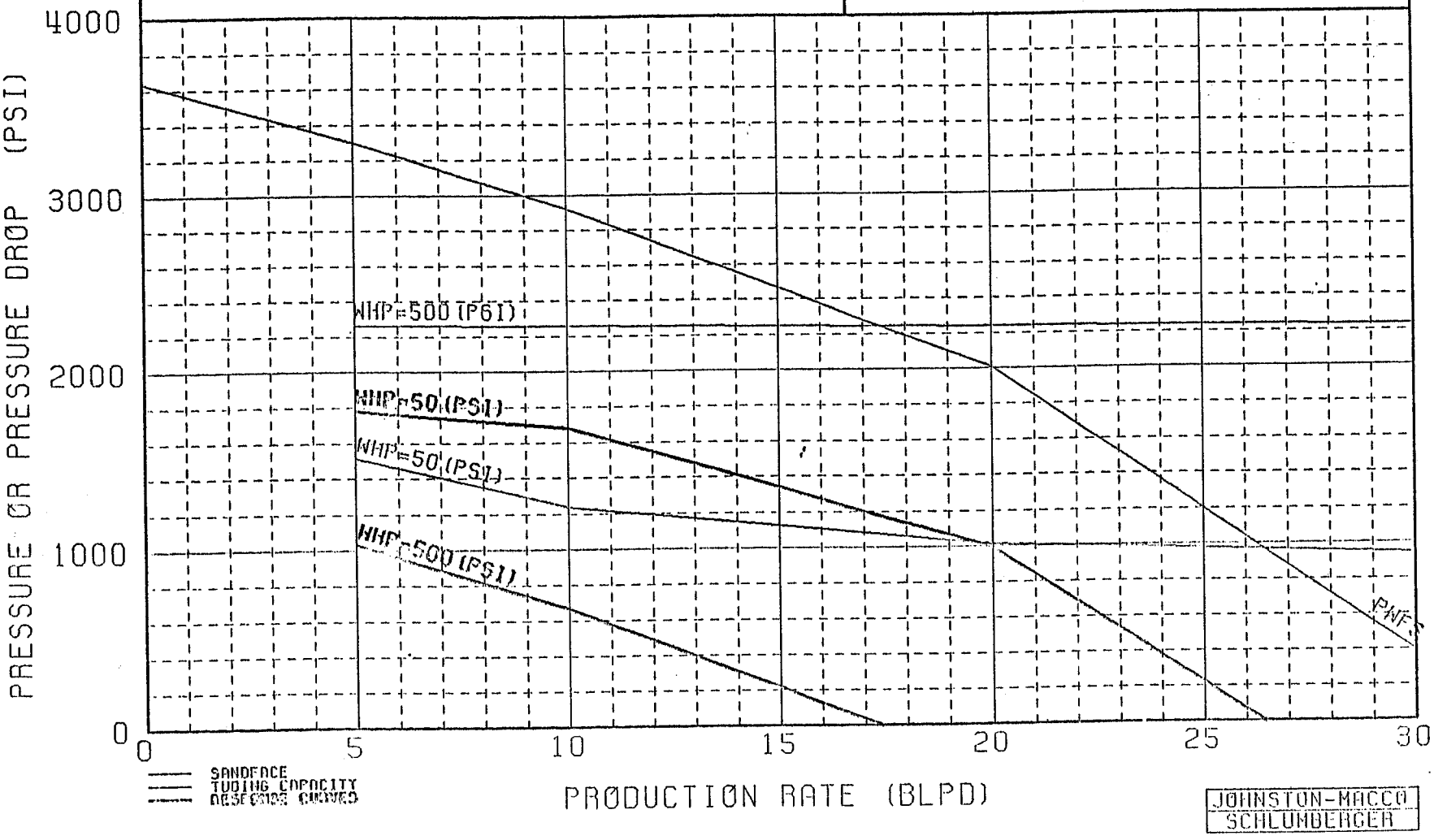
JOHNSTON-MACCO
Schlumberger

RAYMOND T. DUNCAN

BRADFORD CANYON FEDERAL #1-23

13:52:31 19-AUG-82 | NO. 1

TUBING SIZE: 1.278 IN. I.D.
FIELD REPORT #42862E
K = 1.41 MD.
S = 3.17
H = 18 FT.



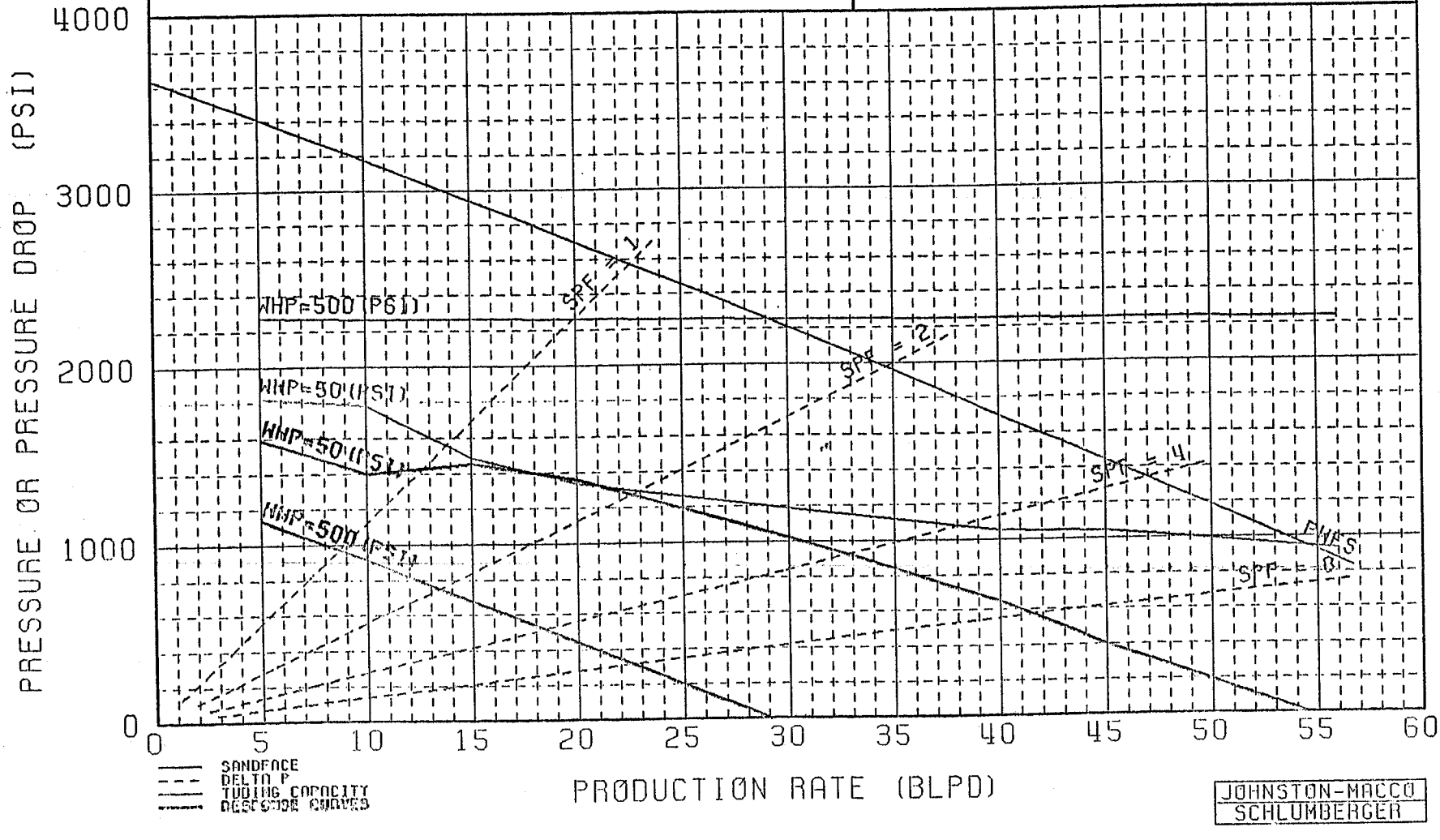
JOHNSTON-MACCO
SCHLUMBERGER

RAYMOND T. DUNCAN

BRADFORD CANYON FEDERAL #1-23

11:14:13 19-AUG-82 | NO. 1

TUBING SIZE: 1.995 IN. I.D.
FIELD REPORT #42862E
K = 1.41 MD.
S = 0
H = 18 FT.



JOHNSTON-MACCO
SCHLUMBERGER

```
****************************************************************************
 THE FOLLOWING OPTIONS ARE USED:
 OIL WELL MODEL
 VARIABLE WHP CASE
INFLOW PERFORMANCE (PI OR IPR) IS NOT DRAWN
 FLOW CONDUIT - TUBING
 EFFECT OF FLOWLINE IS NOT CONSIDERED
 VERTICAL MULTIPHASE FLOW CORRELATION :
    HAGEDORN AND BROWN
     WITH GRIFFITH AND WALLIS CORREL. FOR BUBBLE FLOW
     USES NO-SLIP HOLDUP IF GT. THAN H@B HOLDUP


****************************************************************************
 ........STANDARD PARAMETERS:
       (DEFAULT PARAMETERS WITH AN ASTERISK HAVE BEEN
        MODIFIED)
 PHYSICAL PROPERTY CORRELATIONS:
 Z-FACTOR - HALL AND  YARBOROUGH
 GAS VISCOCITY - LEE ET AL.
 OIL FVF - STANDING
 SOLN. GAS-OIL RATIO - STANDING
 BUBBLE POINT PRESS. - STANDING
 OIL VISCOCITY - BEGGS AND ROBINSON
 WATER VISCOCITY - VAN WINGEN
.....
 ABSOLUTE ROUGHNESS (FT) =   4.9999999E-05
 CONVERGENCE TOLERANCE (PSI) = 1.0
 WATER SPECIFIC GRAVITY = 1.07
****************************************************************************


****************************************************************************
********** INPUT DATA :

 GENERAL DATA:
 WELLHEAD PRESSURES (PSI):
       50.0   500.0
 GAS-LIQUID RATIO (SCF/STB) =    375.0000
 RATES (BLPD) :
        5.0    10.0    20.0    30.0
 SPECIFIC GRAVITY OF GAS =   0.7000000
 WATER FRACTION =   0.0000000
 API GRAVITY =    44.00000
  TUBING I.D. (INCHES) =              1.278
 TVD - TRUE VERT. DEPTH (FT) =    5460.000
 WLD - WIRELINE DEPTH (FT) =    5460.000
 WELLHEAD TEMPERATURE (DEG. F) =    60.00000
 ...RESERVOIR DATA..:
 RESERVOIR TEMPERATURE - BHT (DEG. F) =    135.0000
****************************************************************************


****************************************************************************
.....RATE-PRESSURE COMPUTED INFORMATION
******************************VERTICAL*************************************

          *                           QT
```

(PSI)	5.0	10.0	20.0	30.0
50.0	1517.3	1240.9	1012.5	944.9
500.0	2268.6	2260.3	2243.6	2234.7

```
**********************************************************************
THE FOLLOWING OPTIONS ARE USED:
PRODUCING OIL WELL MODEL
OPEN PERFORATIONS COMPLETION
I.P.R. IS CALCULATED



**********************************************************************
.........STANDARD PARAMETERS:
      (DEFAULT PARAMETERS WITH AN ASTERISK HAVE BEEN
      MODIFIED)
PHYSICAL PROPERTY CORRELATIONS:
Z-FACTOR - HALL AND  YARBOROUGH
GAS VISCOCITY - LEE ET AL.
OIL FVF - STANDING
SOLN. GAS-OIL RATIO - STANDING
BUBBLE POINT PRESS. - STANDING
OIL VISCOCITY - BEGGS AND ROBINSON
WATER VISCOCITY - VAN WINGEN
CONVERGENCE TOLERANCE (PSI) = 1.0
**********************************************************************



**********************************************************************
**********INPUT DATA :

GENERAL DATA:
RATES (BLPD):
          5.0     10.0     20.0     30.0
      NOTE: THESE RATES MAY OR MAY NOT HAVE BEEN MODIFIED
            BY THE PROGRAM IN ORDER TO MATCH THE SYSTEM
            PHYSICAL CAPACITY.
SPECIFIC GRAVITY OF GAS=  0.7000000
WATER FRACTION=  0.0000000
API GRAVITY=    44.00000
PRODUCING GAS-LIQUID RATIO (SCF/STB)=    375.0000
...RESERVOIR DATA..:
RESERVOIR PRESSURE (PSI)=    3642.000
RESERVOIR TEMPERATURE - BHT (DEG. F)=    135.0000
RESERVOIR PERMEABILITY (MD)=    1.410000
          THICKNESS (FT)=    18.00000
          DRAINAGE RADIUS (FT)=    1000.000
          WELLBORE RADIUS (FT)=  0.3300000
          SKIN EFFECT =    3.170000
**********************************************************************
AT IN-SITU CONDITIONS:
OIL VISCOCITY (CP)=  0.9590987
OIL FVF (BBL/STB)=    1.173437
OIL SOLN. GAS-OIL RATIO (BBL/STB)=    375.0000
BUBBLE POINT PRESS. (PSI)=    1239.188
OIL DENSITY (LBM/CU. FT.)=    45.91933
**********************************************************************
......PRESSURE - RATE INFORMATION.....



**********************************************************************
       SAND FACE PRESSURE (PSI)
```

RATE (BLPD)	PWFS (PSI)
5.00	3301.1
10.00	2926.0
20.00	2010.1
30.00	395.2

****

****
*** JOHNSTON-MACCO SCHLUMBERGER ***
*** OPEN PERFORATION PROGRAM ***
****

*** RESERVOIR PARAMETERS :

RESERVOIR PRESSURE,(PSI)	3642.000
FORMATION THICKNESS,(FT)	18.000
FORMATION PERMEABILITY,(MD)	1.410
DRAINAGE RADIUS,(FT)	1000.000
WELLBORE RADIUS,(FT)	0.330
SKIN FACTOR	0.000

****
***PERFORATION PARAMETERS :

CRUSHED ZONE PERMEABILITY,(MD)	0.140
PERFORATION RADIUS,(IN)	0.500
CRUSHED ZONE THICKNESS,(IN)	0.500
PERFORATION PENETRATION,(IN)	7.000
PERFORATED INTERVAL,(FT)	18.000

****
***FLUID PARAMETERS :

OIL WELL	
OIL API GRAVITY	44.000
GAS OIL RATIO,(SCF/STB)	375.000
GAS SPECIFIC GRAVITY	0.700
OIL FORMATION VOLUME FACTOR,(BBL/STB)	1.173
OIL VISCOSITY,(CP)	0.959

****
***INFLOW PERFORMANCE RELATIONSHIP:

DARCYS LAW

****
*** CALCUALTED DATA :

FLOW RATE BLPD	SHOT DENSITY (SPF)	SAND-FACE PRESSURE (PSI)	PERFORATION PRESSURE DROP (PSI)
1.20	1.0	3587.4	133.0
2.39		3532.7	266.3
3.59		3477.7	400.0
4.79		3422.5	534.0
7.18		3311.6	803.2
14.37		2973.8	1619.9
23.94		2512.2	2731.6
1.89	2.0	3555.9	104.8
3.77		3469.3	209.8
5.66		3382.2	315.1

7.55		3294.6	420.6
11.32		3117.9	632.5
22.64		2575.6	1275.6
37.74		1824.3	2155.6
2.49	4.0	3528.4	69.1
4.98		3413.8	138.3
7.47		3298.4	207.6
9.95		3182.1	277.1
14.93		2947.0	416.6
29.86		2220.3	840.1
49.77		1202.4	1420.3
2.83	8.0	3512.5	39.3
5.67		3381.8	78.7
8.50		3250.0	118.2
11.34		3117.1	157.7
17.01		2847.8	237.0
34.02		2012.6	477.9
56.69		835.2	764.2

****

```
******************************************************************************
 THE FOLLOWING OPTIONS ARE USED:
 OIL WELL MODEL
 VARIABLE WHP CASE
INFLOW PERFORMANCE (PI OR IPR) IS NOT DRAWN
 FLOW CONDUIT - TUBING
 EFFECT OF FLOWLINE IS NOT CONSIDERED
 VERTICAL MULTIPHASE FLOW CORRELATION :
    HAGEDORN AND BROWN
     WITH GRIFFITH AND WALLIS CORREL. FOR BUBBLE FLOW
     USES NO-SLIP HOLDUP IF GT. THAN H&B HOLDUP


******************************************************************************
 ........STANDARD PARAMETERS:
       (DEFAULT PARAMETERS WITH AN ASTERISK HAVE BEEN
        MODIFIED)
 PHYSICAL PROPERTY CORRELATIONS:
 Z-FACTOR - HALL AND  YARBOROUGH
 GAS VISCOCITY - LEE ET AL.
 OIL FVF - STANDING
 SOLN. GAS-OIL RATIO - STANDING
 BUBBLE POINT PRESS. - STANDING
 OIL VISCOCITY - BEGGS AND ROBINSON
 WATER VISCOCITY - VAN WINGEN
.....
 ABSOLUTE ROUGHNESS (FT) =   4.9999999E-05
 CONVERGENCE TOLERANCE (PSI) = 1.0
 WATER SPECIFIC GRAVITY = 1.07
******************************************************************************


******************************************************************************
********** INPUT DATA :

 GENERAL DATA:
 WELLHEAD PRESSURES (PSI):
       50.0   500.0
 GAS-LIQUID RATIO (SCF/STB) =     375.0000
 RATES (BLPD) :
        5.0    10.0    15.0    20.0    30.0    40.0    45.0    56.0
 SPECIFIC GRAVITY OF GAS =   0.7000000
 WATER FRACTION =   0.0000000
 API GRAVITY =    44.10000
  TUBING I.D. (INCHES) =          1.995
 TVD - TRUE VERT. DEPTH (FT) =    5460.000
 WLD - WIRELINE DEPTH (FT) =    5460.000
 WELLHEAD TEMPERATURE (DEG. F) =    60.00000
 ...RESERVOIR DATA..:
 RESERVOIR TEMPERATURE - BHT (DEG. F) =    135.0000
******************************************************************************


******************************************************************************
.....RATE-PRESSURE COMPUTED INFORMATION
******************************VERTICAL****************************************

          *                        QT
    WHP   *                       (B/D)
```

(PSI)	5.0	10.0	15.0	20.0	30.0	40.0	45.0	56.0
50.0	1823.4	1781.5	1490.2	1339.5	1186.1	1051.2	1043.8	933.2
500.0	2274.7	2268.2	2266.5	2262.1	2255.3	2248.4	2245.1	2238.0

TEST TICKET DATA PRINTOUT

WELL IDENTIFICATION

1.	WELL	: BRADFORD CANYON FEDERAL #1-23
2.	COMPANY	: RAYMOND T. DUNCAN
3.		: 1777 SOUTH HARRISON
4.		: PENTHOUSE #1
5.		: DENVER, CO 80210
6.		:
7.		:
8.	FIELD	: (WILDCAT)
9.	COUNTY	: SAN JUAN
10.	STATE/PROV.	: UTAH
11.	LOCATION	: SEC. 23 T37S R24E
12.	TECHNICIAN	: KOERNER (VERNAL)
13.	TEST APPROVED BY	: MR. BROWNING
14.	TEST DATE	: 08-08-82
15.	DEPTH REFERENCE	:
16.	DEPTH REFERENCE ELEVATION	: S.L. 5011. FT

HOLE INFORMATION

1. THE HOLE IS STRAIGHT.

2.	TOTAL DEPTH	: 5460. FT
3.	OPEN HOLE DIAMETER	: 7.88 IN

MUD INFORMATION

1.	MUD TYPE	: SALT/GEL/STARCH
2.	MUD WEIGHT	: 13.1 LB/GAL
3.	MUD VISCOSITY	: 42. MARSH FUNNEL SEC
4.	CORRECTED WATER LOSS	: 10.4 CC/30 MIN
5.	MUD RESISTIVITY	: 0.32 OHM-M
6.	MUD RES. MEAS. TEMP.	: 78.0 DEG F
7.	MUD FILTRATE RESISTIVITY	: 0.22 OHM-M
8.	MUD FILT. RES. MEAS. TEMP.	: 80.0 DEG F
9.	MUD CHLORIDES CONTENT	: 40000.0 PPM BY WEIGHT

TEST TICKET DATA PRINTOUT

TEST INFORMATION

1.	FIELD REPORT NUMBER	: 42862E
2.	TEST TYPE	: M.F.E. OPEN HOLE
3.	TEST NUMBER	: 2
4.	TELEFLOW IN USE ?	: NO
5.	SSDR OR J-300 IN USE ?	: NO
6.	SPRO IN USE ?	: NO
7.	PTSDL IN USE ?	: NO

TEST STRING INFORMATION

#	COMPONENT NAME	EFFECTIVE I.D. (IN)	EFFECTIVE O.D. (IN)	FLOW PATH LENGTH (FT)
1	DRILL PIPE	3.83	4.50	4644.
2	DRILL PIPE	2.50	6.50	744.
3	TEST TOOL STRING	0.93	5.00	72.

TEST STRING PLACEMENT

1. TEST TYPE CODE 1 - ON BOTTOM
2. PACKER DEPTHS : 5425. FT & 5430. FT

TEST ZONE DESCRIPTION

	FORMATION NAME	TOP (FT)	BOTTOM (FT)	PRODUCTION ZONE THICKNESS (FT)	POROSITY (%)
1	LOWER DESERT CREEK			18.	6.

TEST CONDITIONS

1. BOTTOMHOLE CHOKE(S) EFF. INTERNAL DIA. : 0.93 IN

****
* TEST TICKET DATA PRINTOUT *
****

TEST TOOL SAMPLE CHAMBER RECOVERY DATA

SAMPLE PRESSURE : 175. PSIG
OIL GRAVITY : 44.1 DEG. API @ 60.0 DEG F
GAS/OIL RATIO : 375. FT3/BBL
GAS/LIQUID RATIO : 375. FT3/BBL

SAMPLE CHAMBER CONTENTS

FLUID	VOLUME	RESISTIVITY	CHLORIDES
GAS	1.18 FT3		
OIL	500.0 CC		
WATER	CC	OHM-M @ DEG F	PPM
MUD	CC	OHM-M @ DEG F	
TOTAL LIQUID	500.0 CC		

RECOVERY INFORMATION

	DESCRIPTION	FEET	% OIL	% H2O	% OTH	API DEG.	API DEG.F	RESISTIVITY OHM-M	RESISTIVITY DEG.F	CHL PPM
1	OIL	770	100			44.1	60.0			

SURFACE INFORMATION

	DESCRIPTION	TIME	PRESSURE	CHOKE SIZE
1	SET PACKER	1414	-	"
2	OPENED TOOL	1415	-	1/8"
3	SURFACE BLOW			
4		1416	20	"
5	GAS TO SURFACE	1419	34	1/2"
6	CLOSED FOR INITIAL SHUT-IN	1431	-	"
7	FINISHED SHUT-IN	1501	-	"
8	RE-OPENED TOOL	1502	-	"
9	SURFACE BLOW			
10		1505	23	"
11		1508	24	"
12	GETTING GAS SAMPLE	1510	30	1/4"
13		1514	30	"
14		1516	24	1/2"
15		1518	24	"
16		1522	20	"

* TEST TICKET DATA PRINTOUT *

	DESCRIPTION	TIME	PRESSURE	CHOKE SIZE
17	GETTING GAS SAMPLE	1524	25	1/4"
18		1526	25	"
19		1527	18	1/2"
20		1533	12	"
21		1541	9	"
22		1547	8	"
23		1602	7	"
24	CLOSED FOR FINAL SHUT-IN	1603	-	"
25	FINISHED SHUT-IN	1758	-	"
26	PULLED PACKER LOOSE	1802	-	-
27	STARTED REVERSING	2100	-	-
28	FINISHED REVERSING	2115	-	-

REMARKS: IN INITIAL FLOW, MAXIMUM FLOW WAS 212.9 MCF/DAY. MINIMUM FLOW WAS 175.3 MCF/DAY.
IN FINAL FLOW, MAXIMUM FLOW WAS 150.3 MCF/DAY. MINIMUM FLOW WAS 43.8 MCF/DAY.

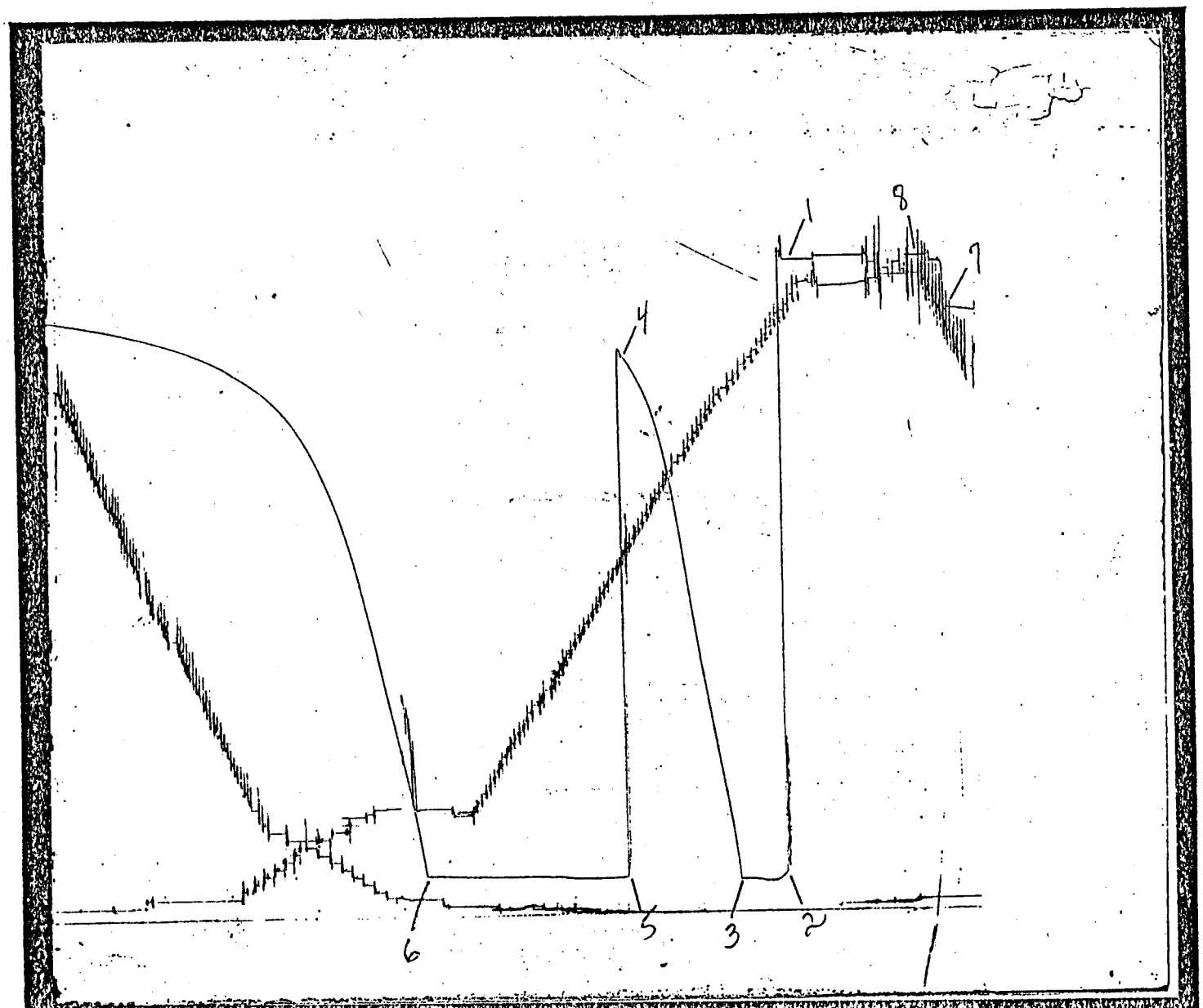
FIELD REPORT NO.: 42862 E

CAPACITY: 4700#

INSTRUMENT NO.: J-1237

NUMBER OF REPORTS: 14

JOHNSTON Schlumberger

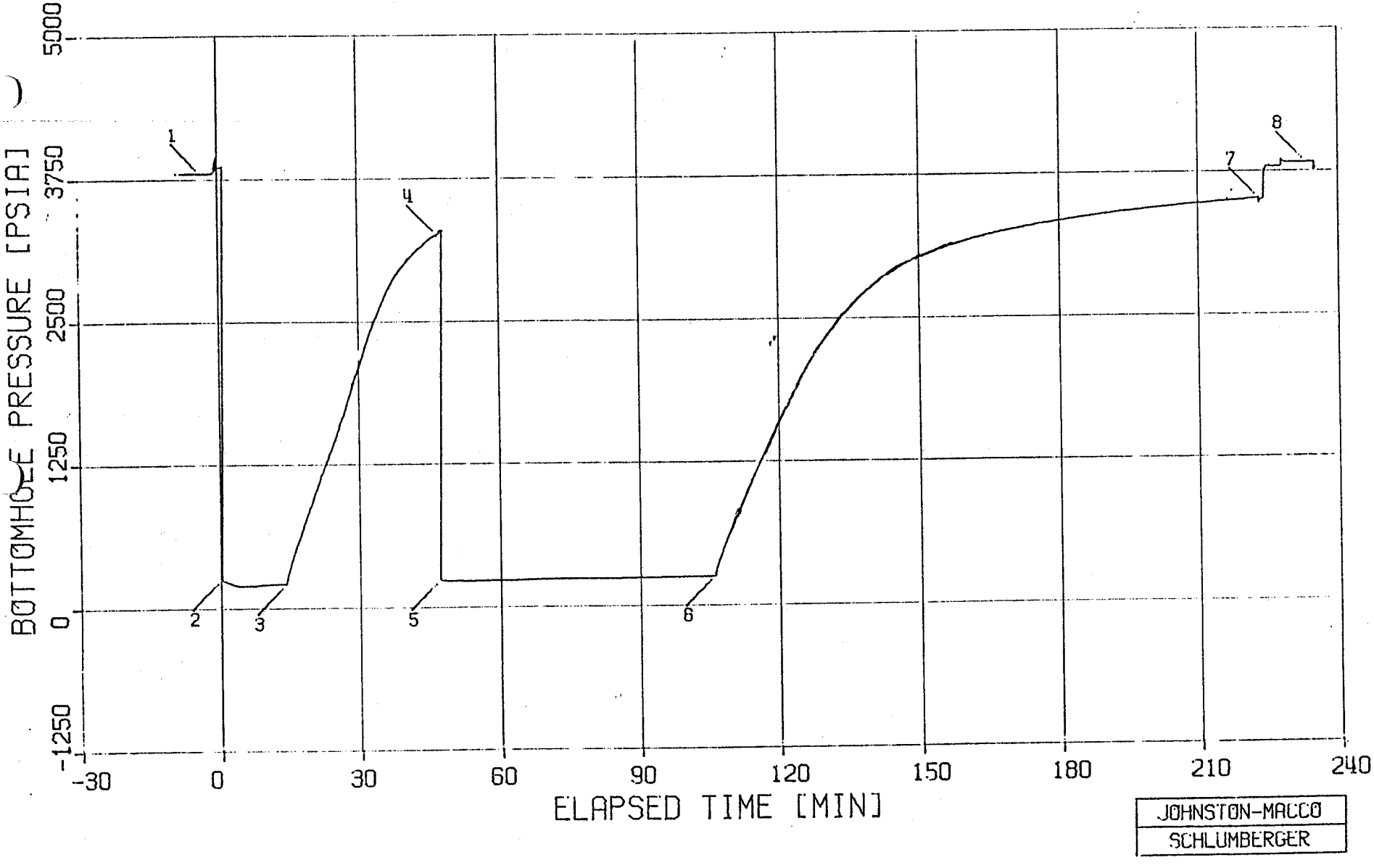


JS-167

BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 42862E
INSTRUMENT NO. J-1237
DEPTH : 5436 FT
CAPACITY : 4700 PSI
PORT OPENING : OUTSIDE

COMPANY : RAYMOND T. DUNCAN
WELL : BRADFORD CANYON FEDERAL #1-23



JOHNSTON-MACCO
SCHLUMBERGER

WELL TEST DATA PRINTOUT

FIELD REPORT # : 42862E

COMPANY : RAYMOND T. DUNCAN
WELL : BRADFORD CANYON FEDERAL #1-23

INSTRUMENT # : J-1237
CAPACITY [PSI] : 4700.
DEPTH [FT] : 5436.0
PORT OPENING : OUTSIDE
TEMPERATURE [DEG F] : 135.0

LABEL POINT INFORMATION

#	TIME OF DAY HH:MM:SS	DATE DD-MM	EXPLANATION	ELAPSED TIME,MIN	BOT HOLE PRESSURE PSIA
1	14:11:12	8-AU	HYDROSTATIC MUD	-3.80	3804
2	14:15: 0	8-AU	START FLOW	0.00	256
3	14:28:48	8-AU	END FLOW & START SHUT-IN	13.80	208
4	15: 1:49	8-AU	END SHUT-IN	46.81	3256
5	15: 1:53	8-AU	START FLOW	46.88	236
6	16: 0:49	8-AU	END FLOW & START SHUT-IN	105.81	249
7	17:57:56	8-AU	END SHUT-IN	222.93	3510
8	18: 8: 4	8-AU	HYDROSTATIC MUD	233.06	3821

SUMMARY OF FLOW PERIODS

PERIOD	START ELAPSED TIME,MIN	END ELAPSED TIME,MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA
1	0.00	13.80	13.80	256	208
2	46.88	105.81	58.93	236	249

SUMMARY OF SHUTIN PERIODS

PERIOD	START ELAPSED TIME,MIN	END ELAPSED TIME,MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
1	13.80	46.81	33.01	208	3256	208	13.80
2	105.81	222.93	117.12	249	3510	249	72.73

TEST PHASE : FLOW PERIOD # 1

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA
14:15: 0	8-AU	0.00	0.00	256
14:20: 0	8-AU	5.00	5.00	194
14:25: 0	8-AU	10.00	10.00	206
14:28:48	8-AU	13.80	13.80	208

TEST PHASE : SHUTIN PERIOD # 1
FINAL FLOW PRESSURE [PSIA] = 208
PRODUCING TIME [MIN] = 13.80

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
14:28:48	8-AU	13.80	0.00	208	0	
14:29:48	8-AU	14.80	1.00	340	132	1.170
14:30:48	8-AU	15.80	2.00	477	269	0.898
14:31:48	8-AU	16.80	3.00	596	388	0.748
14:32:48	8-AU	17.80	4.00	713	504	0.648
14:33:48	8-AU	18.80	5.00	826	618	0.575
14:34:48	8-AU	19.80	6.00	932	724	0.519
14:35:48	8-AU	20.80	7.00	1042	834	0.473
14:36:48	8-AU	21.80	8.00	1156	947	0.435
14:37:48	8-AU	22.80	9.00	1258	1049	0.404
14:38:48	8-AU	23.80	10.00	1373	1165	0.377
14:40:48	8-AU	25.80	12.00	1606	1398	0.332
14:42:48	8-AU	27.80	14.00	1843	1634	0.298
14:44:48	8-AU	29.80	16.00	2098	1890	0.270
14:46:48	8-AU	31.80	18.00	2336	2127	0.247
14:48:48	8-AU	33.80	20.00	2552	2344	0.228
14:50:48	8-AU	35.80	22.00	2735	2526	0.211
14:52:48	8-AU	37.80	24.00	2888	2679	0.197
14:54:48	8-AU	39.80	26.00	2996	2788	0.185
14:56:48	8-AU	41.80	28.00	3096	2887	0.174
14:58:48	8-AU	43.80	30.00	3165	2957	0.164
15: 1:49	8-AU	46.81	33.01	3256	3047	0.152

TEST PHASE : FLOW PERIOD # 2

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA
15: 1:53	8-AU	46.88	0.00	236
15: 6:53	8-AU	51.88	5.00	224
15:11:53	8-AU	56.88	10.00	224
15:16:53	8-AU	61.88	15.00	225
15:21:53	8-AU	66.88	20.00	234
15:26:53	8-AU	71.88	25.00	237
15:31:53	8-AU	76.88	30.00	237
15:36:53	8-AU	81.88	35.00	237
15:41:53	8-AU	86.88	40.00	238
15:46:53	8-AU	91.88	45.00	239
15:51:53	8-AU	96.88	50.00	244
15:56:53	8-AU	101.88	55.00	247
16: 0:49	8-AU	105.81	58.93	249

TEST PHASE : SHUTIN PERIOD # 2
FINAL FLOW PRESSURE [PSIA] = 249
PRODUCING TIME [MIN] = 72.73

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
16: 0:49	8-AU	105.81	0.00	249	0	
16: 1:49	8-AU	106.81	1.00	372	123	1.868
16: 2:49	8-AU	107.81	2.00	488	240	1.572
16: 3:49	8-AU	108.81	3.00	593	344	1.402
16: 4:49	8-AU	109.81	4.00	691	443	1.283
16: 5:49	8-AU	110.81	5.00	787	538	1.192
16: 6:49	8-AU	111.81	6.00	874	625	1.118
16: 7:49	8-AU	112.81	7.00	968	719	1.057
16: 8:49	8-AU	113.81	8.00	1044	795	1.004
16: 9:49	8-AU	114.81	9.00	1138	889	0.958
16:10:49	8-AU	115.81	10.00	1225	976	0.918
16:12:49	8-AU	117.81	12.00	1385	1136	0.849
16:14:49	8-AU	119.81	14.00	1566	1317	0.792
16:16:49	8-AU	121.81	16.00	1737	1488	0.744
16:18:49	8-AU	123.81	18.00	1897	1648	0.702
16:20:49	8-AU	125.81	20.00	2051	1802	0.666
16:22:49	8-AU	127.81	22.00	2191	1942	0.634
16:24:49	8-AU	129.81	24.00	2313	2064	0.605
16:26:49	8-AU	131.81	26.00	2422	2173	0.579
16:28:49	8-AU	133.81	28.00	2530	2281	0.556
16:30:49	8-AU	135.81	30.00	2617	2368	0.535
16:35:49	8-AU	140.81	35.00	2791	2542	0.488
16:40:49	8-AU	145.81	40.00	2935	2686	0.450
16:45:49	8-AU	150.81	45.00	3031	2783	0.418
16:50:49	8-AU	155.81	50.00	3113	2864	0.390

TEST PHASE : SHUTIN PERIOD # 2
FINAL FLOW PRESSURE [PSIA] = 249
PRODUCING TIME [MIN] = 72.73

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
16:55:49	8-AU	160.81	55.00	3176	2927	0.366
17: 0:49	8-AU	165.81	60.00	3229	2980	0.345
17: 5:49	8-AU	170.81	65.00	3273	3024	0.326
17:10:49	8-AU	175.81	70.00	3312	3063	0.309
17:15:49	8-AU	180.81	75.00	3343	3095	0.294
17:20:49	8-AU	185.81	80.00	3374	3125	0.281
17:25:49	8-AU	190.81	85.00	3401	3152	0.268
17:30:49	8-AU	195.81	90.00	3422	3173	0.257
17:35:49	8-AU	200.81	95.00	3442	3193	0.247
17:40:49	8-AU	205.81	100.00	3460	3212	0.237
17:45:49	8-AU	210.81	105.00	3476	3228	0.229
17:50:49	8-AU	215.81	110.00	3492	3244	0.220
17:55:49	8-AU	220.81	115.00	3506	3257	0.213
17:57:56	8-AU	222.93	117.12	3510	3261	0.210

Form 9-330
(Rev. 5-63)

TIGHT HOLE

TIGHT HOLE

SUBMIT IN DUPLICATE*

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other

2. NAME OF OPERATOR
Raymond T. Duncan

3. ADDRESS OF OPERATOR
1777 So. Harrison, P-I, Denver, CO 80210

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)
At surface 1990' FSL, 1600' FWL
At top prod. interval reported below same
At total depth same

5. LEASE DESIGNATION AND SERIAL NO.
U-12942

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
N/A

8. FARM OR LEASE NAME
Bradford Canyon Federal

9. WELL NO.
1-23

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 23-T37S-R24E

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
N/A	7/13/82	San Juan	UT

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)	19. ELEV. CASINGHEAD
7/24/82	8/10/82	8/23/82	5011 GL; 5026 KB	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
5560'	5496'	N/A	→	0-5560'	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD).
Desert Creek

25. WAS DIRECTIONAL SURVEY MADE
No

26. TYPE ELECTRIC AND OTHER LOGS RUN
Acoustilog, ~~Density~~, CNL/DIL, Dipmeter

27. WAS WELL CORED
yes

RECEIVED
SEP 15 1982
DIVISION OF OIL, GAS & MINING

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	48#	111'	17½"	200 sx	
8 3/8	24#	2170'	12¼"	1125 sx	
5½	15.5#	5560'	7 7/8"	300 sx	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8	5411	5411

31. PERFORATION RECORD (*Interval, size and number*)
5432-44' w/2JSPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5432-44	750 gal 15% HCL; 15,000 gal 28%; 15,000 gal. water, 591,000 SCF N_2

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
8/18/82	Flowing	Prod.

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
8/23/82	24	20/64		220	600	0	2700

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
400	0		220	600	0	39°

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)
Flared

TEST WITNESSED BY
Robert Knuckles

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED W S Fallin
W.S. Fallin
TITLE Chief Engineer
DATE 8/23/82

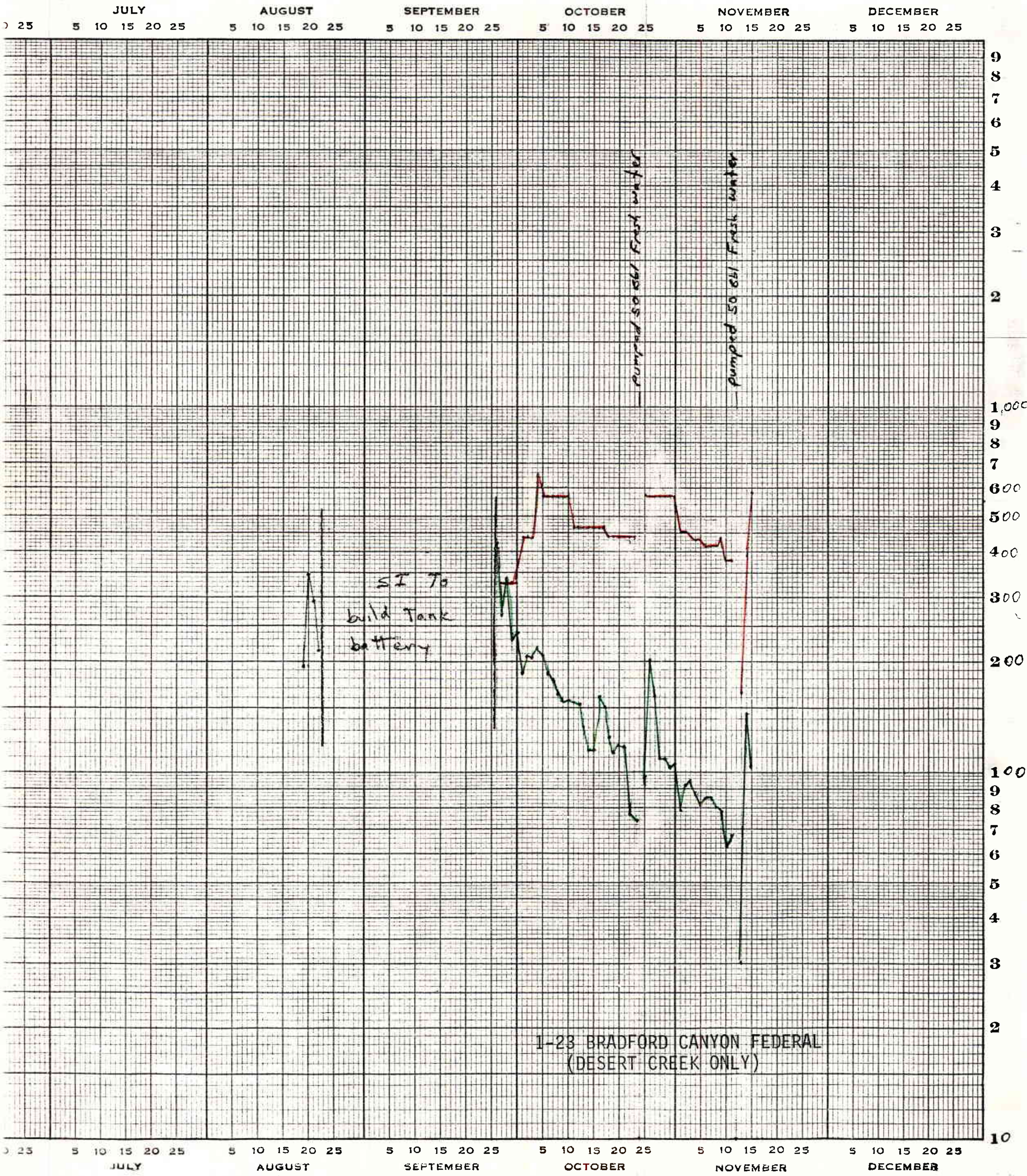
See Spaces for Additional Data on Reverse Side

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES.

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
CORE #1	Cut from 5170-5229',	cut 59', recovered 59'	
Ismay	5170	5189	Anhydrite
	5189	5190	Shale, black
	5190	5194	Limestone
	5194	5195	Black Shale
	5195	5207	Limestone, anhydritic
	5207	5210	Limestone, gray-brown, micro-sucrosic, anhydritic, trace pin-point vugs with brown oil stain, bright yellow fluorescence with good cut.
	5210	5224	Limestone, brown-gray, micro-sucrosic, abundant pin-point to ½" vugs, some partially calcite filled, dark brown-black oil staining, bright yellow fluorescence with good bleeding cut.
	5224	5226	Limestone, gray brown micro-crypto sucrosic, anhydritic, trace of oil staining faint light yellow fluorescence with poor visible porosity.
	5226	5229	Limestone, gray brown, hard & tite, no porosity, no stain.
DST #1			
Ismay	5180	5229	Times: 15-30-60-120 mins. Gas to surface in 8 mins. Maximum rate 14 MCF decreased to 10 MCF at end of test. Recovered 135' GCM (.66 bbls.), 366' O&GCM (1.79 bbls.) and 122' M&O&GCW (.59 bbls.). Sampler: 1.21 cfg @ 250#, 40 cc oil, 780 cc water. Rw .03 @ 110-144,000 ppm chlorides. HP 3112-2065# - 132° FP-1 238-266#. FP-2 248-322. SIP 1908-2328#.
DST #2 Desert Cr.	5430	5460	Times: 15-30-60-115 mins. Opened with strong blow, 20# in 1 min, 1/8" choke. GTS in 4 mins, 34# on ½" choke. Maximum rate 213 MCFPD. 2nd open-strong blow, 3 mins, 23# on ½" choke decreased to 7# on ½" choke at end of test. 150 MCFPD. Reversed out 770' oil (4.0 bbls). 45° API, reddish brown. Sampler @ 175#, 1.18 cfg - 500 cc oil. Pressures: Bottom gauge @ 5436'-135°F. IHP 3765#, IFP 154-173#, ISIP 3205#, FFP 191-229#, FSIP 3401#, FHP 3672#.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Hermosa	4057	4057
Ismay	5113	5113
Lower Ismay	5295	5295
Gothic Shale	5347	5347
Desert Creek	5369	5369
Chimney Rock Shale	5472	5472



JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
pumped 50 bbl Fresh water
pumped 50 bbl Fresh water
SI To build Tank battery
1,000
600
500
400
300
200
100
10
1-23 BRADFORD CANYON FEDERAL
(DESERT CREEK ONLY)

Walter Duncan OIL PROPERTIES

1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

September 13, 1982

Oil, Gas and Mining Division
of Salt Lake City, Utah
4241 State Office Building
Salt Lake City, Utah 84114

Attn: Cleon B. Feight
Director

Re: Bradford Canyon Federal 1-23
Sec. 23-37S-24E
San Juan County, Utah
Lease Serial No. U-12942
TIGHT HOLE

Gentlemen:

This is to request flaring of the casinghead gas from the subject well for a 120-day test period. The well is in a remote area with the closest gas pipeline 10 miles away. This request to flare more than 100 MCFD for 120 days is needed to justify (1) additional development drilling, (2) construction of a pipeline, or (3) incentive to truck the gas. The well has been shut in since August 25, 1982 due to rains in the area that washed out roads to the well site. At the present time, we are constructing a tank battery and expect it to be completed by September 17. The gas will be metered and then burned in a 30-foot high flare tube.

A copy of our drilling wire and the completion report are attached for your convenience. The Bradford Canyon Federal 1-23 well started out strongly at 400+ BOPD and 800 MCFD. After eight partial days of testing, the well was down to 220 BOPD and 500-600 MCFD. The flowing tubing pressure also dropped from 950 to 400 psig. Oil production from the well will no doubt be commercial; therefore, we began construction of the tank battery. There are still doubts, however, about development drilling in the area if production does not hold up.

If the gas rate continues to decline, the gas rate will be down to 300-400 MCFD shortly. Our requested 120 days of production would amount to 36,000 MCF at a 300 MCFD rate, or 48,000 MCF at a 400 MCFD rate. Raymond T. Duncan, as operator of this well, realizes that a loss of gas revenue will be incurred as Duncan has more to lose than anyone. We feel, however, that a 120-day test period is needed to justify additional drilling.

The Bradford Canyon well is a rank wildcat. The closest producing well is four miles away across rugged terrain. The closest gas pipeline is the Mountain

Fuel system at the Patterson Canyon Field, which is to the southeast. Mountain Fuel does not need the gas currently but will buy the gas if we bring it to them.

I recently discussed pipeline costs with a Mountain Fuel engineer in Rock Springs. He had just AFE'd a 7.1 mile 6" pipeline for $960,000. The pipeline will run from the Patterson Field area southeast to the Tin Cup Field area. The cost is $135,000 per mile.

The shortest pipeline route from our Bradford Canyon well to the Mountain Fuel pipeline at the Patterson Canyon Field would be about seven miles, or a million dollars in pipeline costs. This route would cross canyons and is possibly not feasible. The other route would be south for five miles and then would follow a Western Crude Oil pipeline to the Patterson Canyon Field. This route is ten miles and would cost over a million dollars. The Bradford Canyon Federal 1-23 well cost $815,000 to complete. As you can see, the pipeline cost is more than the well. If three or four wells could be drilled in the area surrounding the discovery well, the pipeline costs could be shared.

Trucking the gas from this area would be expensive. The gas would have to be trucked 45 miles to an injection point near Aneth. McCullough is having gas trucked 32 miles from the Tin Cup area and it is costing $3.50 to $5.00 per MCF. Since the truckers would travel an additional 15 miles to the Bradford well site, the MCF per day cost would be greater. Transportation of gas in trucks requires a nine-month minimum contract. A minimum trucking investment for our well would be $500,000 to $600,000. This is the trucker's expense that would have to be recouped within a nine-month period whether we trucked the gas or not. We need to make sure that we have sufficient gas volumes to pay for the trucking of gas.

Included to justify our request is a gas analysis, and reserve and price information, that were sent to the Minerals Management Service in Denver to obtain approval to form a Participating Area.

Hopefully, this letter and attachments have justified our request for 120-day test period. Please call if you have any questions.

Very truly yours,

RAYMOND T. DUNCAN

W. S. Fallin

W. S. Fallin
Chief Engineer

WSF:sw
Encl.

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 9/22/82
BY:

September 22, 1982

Mr. W. S. Fallin, Chief Engineer
Raymond T. Duncan
1777 South Harrison, Penthouse One
Denver, Colorado 80210

RE: Well No. Bradford Canyon Federal 1-23
Sec. 23, T. 37S, R. 24E
San Juan County, Utah

Dear Mr. Fallin:

Receipt of your letter and attachments of September 13, 1982 requesting approval to flare the produced gas for a 120-day test period from the referenced well is acknowledged. This is to advise that we have reviewed these submittals and concur with your request for a 120-day test period.

This approval is contingent upon the submittal of timely progress reports or notices regarding the commencement of the test, the oil and gas production volumes, and additional information concerning gas sales and pipeline possibilities and any other information that would be useful and pertinent in this matter.

Very truly yours,

R. J. Firth
Chief Petroleum Engineer

RJF/as
Attachments
cc: Minerals Management Service

Walter Duncan OIL PROPERTIES

1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

September 17, 1982

CONFIDENTIAL:
TIGHT HOLE

State of Utah
Natural Resources & Energy
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, UT 84116

ATTN: Ronald J. Firth
Chief Petroleum Engineer

RE: Bradford Canyon Fed. 1-23
Sec. 23-37S-24E
San Juan Co., UT

Dear Mr. Firth:

Enclosed is a copy of "Report of Water Encountered During Drilling." Because this is a tight hole, we are requesting that you keep this information confidential for the maximum period allowed.

If you have questions, please call our office.

Very truly yours,
RAYMOND T. DUNCAN

W. S. Fallin

W.S. Fallin
Chief Engineer

cl
encl.

FILE IN TRIPLICATE
FORM OGC-8-X

CONFIDENTIAL: TIGHT HOLE

56 64 03

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number Bradford Canyon Federal 1-23

Operator Raymond T. Duncan Address 1777 So. Harrison, P-1, Denver, CO 80210

Contractor Coleman Drilling Address Drawer 3337, Farmington, NM 87401

Location NE ¼ SE ¼ Sec. 23 T. 37S R. 24E County San Juan

Water Sands

	Depth		Volume	Quality
	From	To	Flow Rate or Head	Fresh or Salty
1.	2290-2310		Unknown	Salty
2.				
3.				
4.				
5.				

(Continue of reverse side if necessary)

RECEIVED
SEP 24 1982
DIVISION OF
OIL, GAS & MINING

Formation Tops

DeChelly 2268'

Remarks

NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.

(b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

MC MEASUREMENT CONCEPTS

4100 S. Parker Rd., #1000 A
Aurora, Colorado 80014
(303) 337-6216

November 8, 1982

Client No. 019

Walter Duncan Oil Properties
1777 South Harrison Street
Denver, Colorado 80210

Attention: Steve Fallin

1-23

Re: Bradford Canyon
Sept. & Oct, 1982

We have completed the processing of charts referenced and have enclosed the following for your records:

1) Volume Summary Statement
2) Chart Summary
3) Detailed Volume Statements

If you have any questions concerning this matter, please give us a call.

23.0102

Very truly yours,

Linda Squier

Linda Squier
Measurement Analyst/Owner

Enclosure: 5 Meter Charts

MC MEASUREMENT CONCEPTS

4100 S. Parker Rd., #1000 A
Aurora, Colorado 80014
(303) 337-6216

VOLUME SUMMARY

Client No. 019

Client: Walter Duncan Oil Properties

Period Covered: September and October, 1982

STATION NO.	STATION NAME	MCF	MMBTU
SEPTEMBER			
001	Bradford Canyon 1-23	1,643	
OCTOBER			
001	Bradford Canyon 1-23	14,889	
		16,532	

CHEMICAL & GEOLOGICAL LABORATORIES

P.O. Box 2794
Casper, Wyoming 82602

Confidential

GAS ANALYSIS REPORT

Company Raymond T. Duncan Date 8-13-82 Lab. No. 41244-2
Well No. Bradford Canyon Fed. 1-23 Location NESW 23-37S-24E
Field Wildcat Formation
County San Juan Depth 5460'
State Utah Sampling point
Line pressure ____ psig; Sample pressure 7 psig; Temperature ____ ° F; Container number J-M Vernal
Remarks
DST #2 (8-8-82)

Component	Mole % or Volume %	Gallons per MCF
Oxygen	0	
Nitrogen	0.50	
Carbon dioxide	0	
Hydrogen sulfide	Nil	
Methane	68.79	
Ethane	15.46	
Propane	8.51	2.335
Iso-butane	1.47	0.480
N-butane	3.25	1.022
Iso-pentane	0.81	0.296
N-pentane	0.86	0.311
Hexanes & higher	0.35	0.161
Total	100.00	4.605

GPM of pentanes & higher fraction 0.768

Gross btu/cu. ft. @60° F. & 14.7 psia (dry basis) 1424
Specific gravity (calculated from analysis) 0.824
Specific gravity (measured) 0.825

Remarks:

CHEMICAL & GEOLOGICAL LABORATORIES

P.O. Box 2794
Casper, Wyoming 82602

GAS ANALYSIS REPORT

Company Raymond T. Duncan Date 8-13-82 Lab. No. 41244-1
Well No. Bradford Canyon Fed. 1-23 Location NESW 23-37S-24E
Field Wildcat Formation
County San Juan Depth 5229'
State Utah Sampling point
Line pressure psig; Sample pressure 5 psig; Temperature ° F; Container number J-M Vernal
Remarks
DST #1 (8-6-82)

Component	Mole % or Volume %	Gallons per MCF
Oxygen	0	
Nitrogen	1.36	
Carbon dioxide	0.03	
Hydrogen sulfide	Nil	
Methane	77.71	
Ethane	11.69	
Propane	5.19	1.424
Iso-butane	0.68	0.222
N-butane	1.87	0.588
Iso-pentane	0.49	0.179
N-pentane	0.64	0.231
Hexanes & higher	0.34	0.157
Total	100.00	2.801

GPM of pentanes & higher fraction	0.567
Gross btu/cu. ft. @60° F. & 14.7 psia (dry basis)	1271
Specific gravity (calculated from analysis)	0.736
Specific gravity (measured)	0.738

Remarks:

CHEMICAL & GEOLOGICAL LABORATORIES
P. O. Box 2794
Casper, Wyoming 82601

CRUDE OIL ANALYSIS REPORT

Company	Duncan Oil Properties	**Date**	8-20-82 **Lab. No.** 41243-5
Well No.	Bradford Canyon Federal 1-23	**Location**	NESW 23-37S-24E
Field	Wildcat	**Formation**	
County	San Juan	**Depth**	5460
State	Utah	**Analyzed by**	KCM, CS

DST #2 (Top)

GENERAL CHARACTERISTICS

Specific gravity @ 60/60 °F.	0.8209
A.P.I. gravity @ 60 °F.	40.9
Saybolt Universal Viscosity @ 70°F., seconds	47.1
Saybolt Universal Viscosity @ 100°F., seconds	37.1
B. s. and water, % by volume	8.0
Pour point, °F.	35
Total sulphur, % by weight	0.06

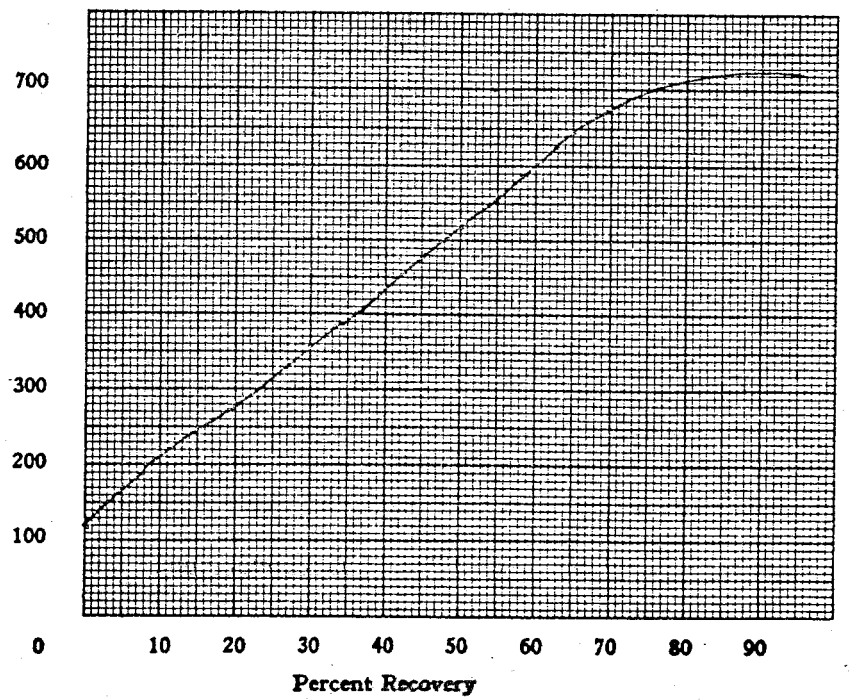
REMARKS:

ENGLER DISTILLATION

Recovery, %	Temperature, °F.
IBP	112
5	170
10	216
15	248
20	276
25	310
30	358
35	396
40	435
45	479
50	518
55	558
60	598
65	642
70	675
75	699
80	711
85	719
90	725
95	726
E.P.	

Recovery, %	98.0
Residue, %	1.5
Loss, %	0.5

DISTILLATION GRAPH



Approximate Recovery	
300 EP gasoline, %	23.5
392 EP gasoline, %	35.0
500 EP distillate, %	13.0

MC MEASUREMENT CONCEPTS

4100 S. Parker Rd., #1000 A
Aurora, Colorado 80014
(303) 337-6216

CHART SUMMARY

Client No. 019

Client: Walter Duncan Oil Properties

Period Covered: September and October, 1982

001 Bradford Canyon 1-23: Differential pen is out of arc and needs adjusting. Time on and off written on charts does not correspond with actual flow. The actual time the chart is placed on meter and removed in relation to flow is important in detecting clock malfunctions (fast or slow). Period 9/26 to 10/4 the differential is over-ranging chart allowing gas to pas unmetered. However, plate change on 10/4 brought differential into an area of greater accuracy. By the end of the month, differential and static were both recording clearly and within chart range.

Form 9–331
Dec. 1973

Form Approved.
Budget Bureau No. 42–R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)

1. oil well ☒ gas well ☐ other

2. NAME OF OPERATOR
Raymond T. Duncan

3. ADDRESS OF OPERATOR
1777 So. Harrison, P-1, Denver, CO 80210

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1990' FSL; 1680' FWL
AT TOP PROD. INTERVAL: same
AT TOTAL DEPTH:

5. LEASE
U-12942

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
Bradford Canyon Unit

8. FARM OR LEASE NAME
Bradford Canyon Federal

9. WELL NO.
1-23

10. FIELD OR WILDCAT NAME
Undesignated

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 23-37S-24E

12. COUNTY OR PARISH
San Juan

13. STATE
UT

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5011' GR

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF: *	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐

(other) * Run Pressure Buildup Survey and Recomplete in Ismay

(NOTE: Report results of multiple completion or zone change on Form 9–330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Began recompletion of Ismay Zone on 7/6/83 per attached Form 9-330.

Work was completed on 7/21/83. Please note: Ismay perfs open to annulus.

Well is currently shut in pending gas pipeline hookup.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED John W. Lowry TITLE Dist. Drlg & Prod. Supt. DATE 7/25/83
John W. Lowry

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Operator: Raymond T. Duncan
Contractor: Coleman Drilling, #3
5560' Desert Creek Test
Elevations: 5011' G.L. K.B. 5026'

Duncan Int. farm-in with Duncan W.I.
50% Before payout and 25% After Payout.
Bradford Canyon Prospect #44-2-41
No Lease # assignment

#1-23 BRADFORD CANYON FEDERAL
NE SW SECTION 23-37S-24E
SAN JUAN COUNTY, UTAH

TIGHT HOLE STATUS
as of 8/5/82

7-24-82 111', running 13-3/8" csg. Survey: 1¼° @ 111'. Spudded well @ 1:30 a.m. 7-24-82.

7-25-82 381', drlg. Survey: 1-3/4° @ 320'. Ran 3 jts of 13-3/8", 54.5# STC csg, set @ 111' K.B. Cmt'd with 200 sxs Class "B" with 3% CaCl. Circulated cmt to surface. WOC 12 hrs. Job complete @ 8:35 a.m. 7-24-82

7-26-82 935', drlg. Survey: 1° @ 537', 1° @ 788'.

7-27-82 1583', tripping. Surveys: 1½° @ 994', 1° @ 1311', 1½° @ 1583'.

7-28-82 2166', prep to run 8-5/8" csg.

7-29-82 2213', drlg. Ran 54 jts 8-5/8" csg, set @ 2170', K.B. B.J. cmt'd with 850 sxs lite 3/4#/sx flocele, tailed in with 150 sxs Class "B" reg. with 2% CaCl, cmt just barely circulated. Pumped down @ 1:45 p.m. 7-28-82. Fill from top thru 1" pipe with 125 sxs, held okay. Job complete @ 4:00 p.m. 7-28-82. WOC.

7-30-82 3320', drlg. Surveys: 1¼° @ 2770', 1° @ 3256'. MW 8.6, VIS 27.

7-31-82 4250', drlg. MW 9.2, VIS 29, WL 25.0. Survey: 1° @ 3714'. Repairs complete on pit wall break. Inspected by BLM - okay.

8-1-82 4510', drlg. MW 10.3, VIS 40, WL 13.0. Survey: 1½° @ 4235'. Trip for bit #6. Strap pipe on trip 4' deep - made correction.

8-2-82 4842', drlg. MW 10.8, VIS 36, WL 8.0. Top Hermosa 4060'.

8-3-82 5055', tripping for bit. MW 11.1, VIS 36, WL 7.0.

8-4-82 5170', tripping for core barrel. MW 11.3, VIS 36, WL 8.0, PH 12. Sample top - Ismay 5127'; 34' high to prognosis.

8-5-82 5229', laying down Core #1. Cut from 5170-5229', cut 59', recovered 59'.

From 5170-89', Anhydrite.
From 5189-90', Shale, black.
From 5190-94', Limestone, brown-gray, hard & tite.
From 5194-95', black Shale, light yellow fluorescence, good cut.
From 5195-98', Limestone, brown-gray, anhydritic, hard & tite.
From 5198-99', Limestone, medium gray, dense.
From 5199-5202', Limestone, medium-dark gray, anhydritic, dense.
From 5202-5207', Limestone, light brown-gray, dense and hard.
From 5207-5210', Limestone, medium gray-light medium brown, micro-sucrosic, partially anhydritic, hard and dense, trace pin-point vugs with light brown oil stain, bright yellow fluorescence with good cut.
From 5210-24', Limestone, light medium brown-gray, micro-sucrosic, abundant pin-point to ½" vugs, some partially calcite filled, appears to be well interconnected, abundant dark brown-black oil staining, bright yellow fluorescence and faint fluorescence in matrix with good bleeding cut.
From 5224-26', Limestone, light medium gray-light brown micro-crypto sucrosic, anhydritic in part, trace of oil staining, faint light yellow fluorescence with poor visible porosity.
From 5226-29', Limestone, medium gray-light brown gray, hard & tite, no porosity, no stain.

Plan to test tomorrow morning.

8-6-82 5229', running DST #1: 5180-5229' (Johnson Testers). TIGHT HOLE. Times: 15-30-60-120 mins. Gas to surface in 8 mins. Maximum rate 14 MCF decreased to 10 MCF, decreasing entire 60 min. open. No fluid to surface. Recovered 135' GCM (.66 bbls.), 366' O&GCM (1.79 bbls.), 1% oil and 122' M&O&GCW (.59 bbls.), 1% oil. Sampler: 1.21 cfg - 250# pressure, 40 cc oil, 780 cc wtr. Rw .03 @ 110° - 144,000 ppm chlorides. HP 3112-3065# - 132° FP 1 238-266#, FP 2 248-322, SIP 1908-2328#

Raymond T. Duncan, #1-23 Bradford Canyon Fed., NE S 23-37S-24E, San Juan Co., Utah
Contractor: Coleman Drilling, Rig #3
5560' Desert Creek Test
Elevations: 5011' G.L. 5026' K.B.

Duncan Int' Farm in with Duncan W.I. 50% Before Payout and 25% After Payout.
Bradford Canyon Prospect #44-2-41
No Lease # Assignment

TIGHT HOLE

8-7-82 5330', drlg. MW 11.3, VIS 45, WL 12.0. Drilling Break 5442-5460' (Lower Desert Creek zone) Broke from 8 mins/ft. to 1½ mins/ft, still in break at 5460'. Gas 416 units, C-1 - C-4. Dolomite, medium-dark brown, good visible porosity, abundant oil staining, abundant green-yellow fluorescence with bright yellow-blue streaming cut.

8-8-82 5460', tripping out of hole for DST #2: 5430-60' (Lower Desert Creek) Times: 15-30-60-115 mins. Opened with strong blow, 20# in 1 min, 1/8" choke. GTS in 4 mins, 34# on ½" choke. Maximum rate 213 MCFPD. 2nd open - strong blow, 3 mins, 23# on ½" choke decreased to 7# on ½" choke at end of test. 150 MCFPD. Reversed out 770' oil (4.0 bbls.) 45°API, reddish-brown. Sampler: 175#, 1.18 cfg - 500 cc oil. Pressures: Bottom gauge @ 5436'-135°F. IHP 3765#, IFP 154-173#, ISIP 3205#, FFP 191-229#, FSIP 3401#, FHP 3672#.

8-9-82 5472', drlg. MW 13.4, VIS 45, WL 16.0.

8-10-82 5560', logging. MW 13.2, VIS 52, WL 16.8. Computer went out on logging truck, started logging @ 7:00 a.m. Hole is stabilized and appears to be in good shape.

8-11-82 5560', DTD, laying down drill pipe to run 5½" csg. LTD 5550'. MW 13.5, VIS 50, WL 16.8. Ran Acostilog Density, CNL/DIL and Dipmeter. Should have 5½" cmt'd by 2:00 p.m.

8-12-82 5560', T.D. MORT. Ran 141 jts 5½" 15.5# K-55 LTC, set @ 5560', float collar @ 5520', 7 centralizers. B. J. Hughes cmt'd with 300 sxs Class "B" with 5# salt/sx + .75% D-31, 800 gals. mud sweep. Good returns throughout job. Maximum pressure 2000 psi, float did not hold. Held pressure on collar for 8 hrs. Rig Released @ 12:00 p.m. 8-11-82.

WAITING ON COMPLETION TOOLS.

TIGHT HOLE

8-14-82 RU service unit, running Correlation-Gamma Ray log. Picked up 171 jts 2-7/8" tbg - 6.5#. Set Baker Model "R" pkr @ 5368'. Test tbg and pkr to 2500#, held okay. Bond log was good bond. Pressured csg to 1000#, no change in bond log.
Note: Cased hole log was 22' deeper than the open-hole log.

8-15-to 8-16-82 Reset pkr to 5418', no tail pipe. Test pkr to 2000#, tested okay. Ran Gamma-Ray Collar log to recheck depths. Perf'd with GO from 5432-44' with 2 jet shots/ft. (24 holes - .3" holes). Swabbed 2 pulls from 3500', started gassing. Well died down in 15 mins. Treated with Western, used 750 gals. 15% HCL mud acid. Max pressure 3800#, Avg 3500#, Avg rate @ 2 BPM. ISIP 3050#, 5 min 2050#, 30 mins 1500#. Blew well down, swabbed 4 pulls, well started flowing. Recovered 49 BA&LW. Started flow test - 1st 3 hrs., recovered 16 BO with 1.4% water cut (5.3 BOPH). Estimated gas @ 390 MCFPD on 24/64" choke, FTP 150-200# - 39° API @ 60°, flowed through night. Total test period (including above 3 hr. test) 13 hrs., recovered 48.4 BO, .4% water cut, FTP 100# on 20/64" choke (3.7 BOPH). Estimated gas @ 390 MCFPD.

8-17-82 Flow testing. Opened to 48/64" choke for 4 hrs. TP 25-75#, recovered 5 BO. SI at 4:00 p.m. 5-16-82.

8-18-82 Testing. ONSITP 1700#. RU Dowell, treated with 15,000 gals. 28% MSR-100, 15,000 gals. Water Frac-40 and 591,000 scf N_2. Insert (12) ball sealers half way through the job, good ball action. Pressure went up and broke back 500#. Maximum pressure 5000#, Avg 4700#. Average Injection Rate @ 4.5 BPM. ISIP 4200#, 15 mins 3800#, 30 mins 3600#. Blew well down for 30 mins and oil started coming into pit, acid was spent. Flow testing to tank. Hooking up test separator.

Raymond T. Duncan, #1-23 Bradford Canyon Fed., NE SW 23-37S-24E, San Juan Coun[illegible] Utah
Contractor: Coleman Drlg., Rig [illegible]3
5560' Desert Creek Test
Elevations: 5011' G.L. 5026' K.B.

Duncan Int: Farm in with Duncan W.I. 50% before Payout and 25% After Payo[illegible]
Brad[illegible]ord Canyon Prospect #44-2-41
No Lease # Assignment

TIGHT HOLE STATUS

8-19-82 Flowed 12 hrs., recovered 245 BO, Avg 20 BOPH and 2.4 BWPH, 12% acid water. FTP 950# - 20/64" choke. Estimated gas 700-800 MCFD.

8-20-82 Flowed 22 hrs., recovered 300 BO, approximately 100 BW - 18.2 BFPH. FTP 600# on 20/64" choke.

8-21-82 SD to redo separator and flare piping. Flowed 12 hrs., recovered 172 BO. FTP 700# - 20/64" choke. Estimated gas 800 MCFD.

8-22-82 Flowed 25½ hrs., recovered 385 BO. FTP 600-700# on 20/64" choke. Still recovering 12-15% acid water.

8-23-82 Flowed 18 hrs., recovered 212 BO, 0 BW. FTP 400# on 20/64" choke. Trouble getting to location and calling reports in because of rain and roads washed out.

8-24-82 IPF 220 BO, no water - 24 hrs. 20/64" choke, FTP 400#. Gas rate measured with orifice tester - 600 MCFD. GOR 2700.

8-25-82 Flowed 18 hrs., recovered 175 BO, 0 BW. FTP 400# on 20/64" choke. Gas rate 500-600 MCFD.

Note: Roads washed out again because of rain. SI well until roads are dried up and tank battery is built.

FINAL REPORT - OIL WELL.

TIGHT HOLE STATUS

DUNCAN/1 23 BRADFORD CANYON FED.
UNNAMED-DESERT CREEK
SAN JUAN, CO. UTAH

RESERVES AND ECONOMICS

WALTER DUNCAN OIL PROPERTIES

DATE:[illegible]
TIME:12:31CDT
FILE:RAH
PROJ: 7

AS OF DATE: 11/ 1/1982

Confidential

END MO-YR	GROSS OIL PRODUCTION ----MB----	GROSS GAS PRODUCTION ----MMF---	OIL TO NET INTEREST ----MB----	GAS TO NET INTEREST ----MMF---	REVENUE TO INTEREST ----M$----	NET INVESTMENT ----M$----	NET OPER EXPENSES ----M$----	NET PROFIT BEFORE FIT ----M$----	CUMULATIVE NET PROFIT ----M$----	CUM. DISC NET PROFIT ----M$----
CUM.	0.	0.								
10-83	68.544	185.068	55.035	148.595	2651.980	815.000	138.599	1098.381	1098.381	919.517
10-84	49.572	133.846	40.897	110.423	1637.308	0.	121.465	1515.843	2614.224	2044.689
10-85	35.927	97.001	29.640	80.026	1272.680	0.	107.194	1165.486	3779.710	2753.124
10-86	26.091	70.446	21.525	58.118	992.381	0.	97.535	894.846	4674.556	3198.543
10-87	18.986	51.263	15.664	42.292	771.313	0.	91.274	680.039	5354.595	3475.737
10-88	13.844	37.379	11.421	30.837	600.719	0.	88.014	512.705	5867.300	3646.875
10-89	10.115	27.310	8.345	22.531	468.742	0.	87.213	381.529	6248.829	3751.163
10-90	7.405	19.993	6.109	16.494	365.181	0.	88.413	276.768	6525.597	3813.114
10-91	5.430	14.663	4.480	12.097	284.769	0.	91.408	193.361	6718.958	3848.557
10-92	3.992	10.776	3.293	8.890	222.699	0.	96.021	126.678	6845.636	3867.572
10-93	2.938	7.934	2.424	6.546	174.461	0.	102.098	72.363	6917.999	3876.467
10-94	2.167	5.852	1.788	4.828	137.018	0.	109.563	27.455	6945.454	3879.230
REM.	0.	0.	0.	0.	0.	0.	0.	0.	6945.454	3879.230
ULT.	245.011	661.531	200.621	541.677	8979.251	815.000	1218.797	6945.454	6945.454	3879.230

PAYOUT, MONTHS	5.1	GROSS WELLS	1	UNDISC. PROFIT/INVEST.		8.522
LIFE, YEARS	12.00	MONTHS IN 1ST YR.	12	DISC. PROFIT/INVEST.		4.760
RATE OF RETURN,PCT	100.00	INITIAL W.I.,PCT	100.0000			
DISCOUNT RATE,PCT	20.00	INITIAL N.I.,PCT	77.5000			
				PRESENT WORTH PROFILE		
				5 PCT	5899.950 40 PCT	2481.032
INIT. OIL PRICE,$/B	32.00	INIT. GAS PRICE,$/M	3.20	10 PCT	5076.301 50 PCT	2045.355
INIT. OIL RATE,BOPD	220.00	INIT. GAS RATE,MCFD	594.00	15 PCT	4416.355 60 PCT	1708.801
				20 PCT	3879.230 80 PCT	1224.403
NET OIL REVENUE,M$	6834.429	NET GAS REVENUE,M$	2144.821	30 PCT	3064.506 100 PCT	893.491

BRADFORD CANYON UNIT
WELL: #1-23 Bradford Canyon Federal

Confidential

ECONOMIC ANALYSIS

Total Well Cost: $815,000

Monthly Operating Cost: $3,000

Total Royalty: 22½% (12½% basic royalty + 10% override)

Severance and AdVolorem Tax: 9.6%

Windfall Profits Tax: 2.57%

Oil Price: $32.00/barrel

Gas Price: $3.20/MCFG

Expected Cumulative Production: 245,000 BO, 661 MMCFG

Production Delcine: 27% annual (2.25%/month)

Production Life of Well: 12 years

Gross Income: $9,715,000

Net Income to Working Interest Owners: $6,945,000 (Minus taxes and operating expenses, before Federal Income Tax)

Discount Rate: 20%

Net Present Worth: $3,879,200

Bradford Canyon Fed 1-23 Initial Production History

Date	BOPD	MCFD	BWPD	Hrs	Choke	Flw Press	Static	Diff	Remarks
9-26	422	—	0	21	14				Meter Run Problem
27	269	329	0	22					Oil Dump Problem
28	340	329	0	22					Replace Valve
29	229	329	0	24					
30	240	329	0	24					
10-1	189	329	0	20					Flowline Repair
2	209	441	0	24					
3	205	441	0	24	14				
4	220	663	0	24	20				Chg Orifice Plate to 1.5"
5	209	573	1	24	48				
6	186	573	0	24	↓				
7	180	573	2	24					
8	164	573	0	24					
9	155	573	1	24					
10	159	573	1	24					
11	155	467	0	24					
12	153	467	0	24					
13	132	467	1	24					
14	115	467	1	23					Check Parafin
15	115	467	1	22					Hot Oil
16	162	467	2	24					
17	153	467	1	24					
18	125	441	4	24					
19	114	441	1	24					
20	119	441	0	24					
21	118	441	0	24					
22	77	441	0	22	↓				Meter Problem
23	72	441	0	24	48	75	4	3.8	
24	—	—	0	0	15	1025	0	0	Inj 50 Bbls H_2O + 30 BO @ 160°
25	97	570	10	24	20	625	4	4.0	
26	201	570	18	24	48	375	4	5.5	
27	161	570	9	24	48	110	4	7.0	
28	109	570	4	24	48	105	4	6.0	
29	110	570	3	24	48	100	4	5.5	
30	103	570	2	24	48	100	4	5.3	
10-31	105	570	2	24	48	100	4	5.0	
11-1	89	451	2	24	48	95	4	4.9	
2	92	451	0	24	48	90	4	4.9	
3	95	442	0	23	48	90	4	4.8	Cut Parafin
4	88	433	2	23	48	90	4	4.7	Check Parafin
5	81	433	2	24	48	90	4	4.7	
6	85	414	2	24	48	90	4	4.5	
7	85	414	1	24	48	90	4	4.5	
8	81	414	1	24	48	85	4	4.5	
9	78	436	1	24	48	90			
10	63	378	1	24	48	85			
11	67	378	1	24	48	85			
12	—	—	0	0		1100			Inj 50 Bbls H_2O + 30 BO + Hot Oil Flowline
13	30	165	2	24	15	525			
14	145	388	18	24	22	275			
11-15	103	582	9	24	48	100			

Integrated Gas Numbers ↑ ↓ Field Estimate

7054 BO 22312 MCF GOR 3160

Walter Duncan OIL PROPERTIES

1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

November 19, 1982

Mr. R. J. Firth
Chief Petroleum Engineer
State of Utah
Natural Resources and Energy
Division of Oil, Gas & Mining
4241 State Office Building
1588 W. North Temple
Salt Lake City, Utah 84114

Mr. E. W. Guinn
District Oil & Gas Supervisor
U. S. Department of the Interior
Minerals Management Service
Oil and Gas Operations
2000 Administrative Building
1745 W. 1700 South
Salt Lake City, Utah 84104-3884

Re: Bradford Canyon Federal 1-23
Sec. 23-37S-24E
San Juan County, Utah
Lease Serial No. U-12942
TIGHT HOLE

Gentlemen:

The subject well has been producing since September 26, 1982. The attached information will bring both of your offices up to date on the testing of the Bradford 1-23 well. Attached is (1) oil and gas production data, (2) the integrated gas information through November 1, and (3) a plot of daily production through November 15.

Hopefully our meeting on November 22 will provide more information than I could put in a letter explaining our plans for the area.

Very truly yours,

RAYMOND T. DUNCAN

W. S. Fallin

W. S. Fallin
Production Manager

WSF:sw
Encl

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

June 14, 1983

Raymond T. Duncan
1777 South Harrison
Penthouse # 1
Denver, Colorado 80210

Re: Well No. Bradford Cny Fed. # 1-23
Sec. 23, T. 37S, R. 24E.
San Juan County, Utah

Gentlemen:

According to our records, a "Well Completion Report" filed with this office August 23, 1982, from above referred to well, indicates the following electric logs were run: Acoustilog density, CNL/DIL, Dipmeter. As of todays date, this office has not received these logs.

Rule C-5, General Rules and Regulations and Rules of Practice and Procedure, requires that a well log shall be filed with the Commission together with a copy of the electric and radioactivity logs.

We will be happy to acknowledge receipt of your response to this notice if you will include an extra copy of the transmittal letter with a place for our signature, and a self addressed envelope for the return. Such acknowledgement should avoid unnecessary mailing of a second notice from our agency.

Your prompt attention to the above will be greatly appreciated.

Respectfully,

DIVISION OF OIL, GAS AND MINING

Cari Furse

Cari Furse
Well Records Specialist

CF/cf

Walter Duncan OIL PROPERTIES

1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

June 22, 1983

State of Utah
Natural Resources & Energy
4241 State Office Bldg.
Salt Lake City, Utah 84114

Attn: Cari Furse

Re: Raymond T. Duncan
#1-23 Bradford Canyon Federal
NE SW 23-37S-24E
San Juan County, Utah

Dear Ms. Furse:

Please find enclosed another set of the logs requested on the above captioned well in San Juan County, Utah.

I would appreciate your acknowledging receipt of these logs by signing in the form below and returning it to our office for verification of same. I have enclosed a self-addressed, stamped envelope for your convenience.

Sorry for any inconvenience this matter might have caused you.

Thank you for your assistance in this matter.

Yours truly,

WALTER DUNCAN OIL PROPERTIES

Ms. Paula Chavez
Geological Secretary

/pc

encl.

Logs received 6-28-83
Date

Received by: C. Furse
Name

Form 9-330
(Rev. 5-63)

FILE AWAY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [ ] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other Recomplete Ismay Zone

2. NAME OF OPERATOR
Raymond T. Duncan

3. ADDRESS OF OPERATOR
1777 So. Harrison, P-1, Denver, CO 80210

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)
At surface 1990' FSL; 1680' FWL
At top prod. interval reported below same
At total depth

5. LEASE DESIGNATION AND SERIAL NO.
U-12942

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
Bradford Canyon Unit

8. FARM OR LEASE NAME
Bradford Canyon Fed.

9. WELL NO.
1-23

10. FIELD AND POOL, OR WILDCAT
Undesignated

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 23-37S-24E

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
N/A	1/31/83	San Juan	UT

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)	19. ELEV. CASINGHEAD
PLEASE REFER TO ORIGINAL COMPLETION REPORT				

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
			→		

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)
Ismay: 5220-5224'; 5200-5210'

25. WAS DIRECTIONAL SURVEY MADE
no

26. TYPE ELECTRIC AND OTHER LOGS RUN
GR/CCL 5279-5000'

27. WAS WELL CORED

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
PLEASE REFER TO ORIGINAL COMPLETION REPORT					

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8	5415'	5415'

31. PERFORATION RECORD (*Interval, size and number*)
5220-2224 2JSPF, 9 holes
5200-5210 2JSPF, 20 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5220-5224'	500 gal. HCL + add.
5200-5210'	3500 gal 15% MSR + add.

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
7/13/83	Flowing	Shut in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
7/21/83	24	20/64		145	582	117	4014

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
575 psi	N/A		172	514	68	41.3

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)
vented

TEST WITNESSED BY
Robert Knuckles

35. LIST OF ATTACHMENTS
N/A

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED John W. Lowry TITLE Dist. Drlg. & Prod. Supt. DATE 7/25/83
John W. Lowry

See Spaces for Additional Data on Reverse Side

Walter Duncan OIL PROPERTIES

1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

August 4, 1983

State of Utah
Oil & Gas Mining Division
4241 State Office Building
Salt Lake City, UT 84114

ATTN: Cleon B. Feight

RE: Bradford Canyon Unit
Bradford Canyon Fed. 1-23
Sec. 23-37S-24E
San Juan Co., UT

Dear Mr. Feight:

The previous report sent to your office for the above-captioned well was in error. Attached are three copies of the corrected report, dated August 4, 1983.

Please disregard the previous report dated July 25, 1983.

Very truly yours,
RAYMOND T. DUNCAN

John W Lowry

John W. Lowry
District Drilling & Prod. Supt.

cl
cc. to Working Interest Owners

RECEIVED

OCT 28 1985

DIVISION OF OIL
GAS & MINING

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well [X] gas well [ ] other

2. NAME OF OPERATOR
Raymond T. Duncan

3. ADDRESS OF OPERATOR
1777 So. Harrison, P-1 Denver, CO 80210

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1990' FSL: 1680' FWL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-12942

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
Bradford Canyon Unit

8. FARM OR LEASE NAME
Bradford Canyon Fed.

9. WELL NO.
1-23

10. FIELD OR WILDCAT NAME
Bradford Canyon

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 23-37S-24E

12. COUNTY OR PARISH
San Juan

13. STATE
UT

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5026' KB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	[ ]		[ ]
FRACTURE TREAT	[ ]		[ ]
SHOOT OR ACIDIZE	[ ]		[ ]
REPAIR WELL	[ ]		[ ]
PULL OR ALTER CASING	[ ]		[ ]
MULTIPLE COMPLETE	[ ]		[ ]
CHANGE ZONES	[ ]		[ ]
ABANDON*	[ ]		[ ]
(other) Ready to Inspect			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Subject well is ready for final inspection. Pits have been restored, and seeded.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED John A. Bettridge TITLE Oper. Supt. DATE 10/23/85
John A. Bettridge

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Technology Management Inc.
Consulting Engineers and Chemists
526 20¼ Road, Grand Junction, Colorado 81503 (303) 242-6154

To: RAYMOND T. DUNCAN OIL PROPERTIES
1777 S. HARRISON, PENTHOUSE 1
DENVER, CO 80210

Date: APR. 28, 1986
No.: TMI/RTD 86-W1

WATER ANALYSIS

SUBMITTED BY: KNUCKLES PUMPING SERVICE
IDENTIFICATION: BRADFORD CANYON 1-22

DATE SAMPLED: APR. 22, 1986
DATE RECEIVED: APR. 28, 1986
DATE TESTED: APR. 28, 1986

TEST		RESULT
TEMPERATURE, Deg. C		25
CONDUCTIVITY, MICROMHOS/cm		470500
RESISTIVITY, OHMS/M		.021
SPECIFIC GRAVITY @ 25/25 Deg. C		1.195
pH		6.0
TOTAL DISSOLVED SOLIDS	mg/L	282412
POTASSIUM, AS K,	mg/L	5000
IRON, AS Fe,	mg/L	7.14
CALCIUM, AS Ca,	mg/L	19584
MAGNESIUM, AS Mg,	mg/L	1166
CHLORIDE, AS Cl,	mg/L	172000
CARBONATE, AS CaCO3	mg/L	0
BICARBONATE, AS CaCO3	mg/L	350
SULFATE, AS SO4	mg/L	210
SODIUM, AS Na	mg/L	84026

Respectfully submitted by
TECHNOLOGY MANAGEMENT, INC.

Carlon C. Chambers

Carlon C. Chambers, P.E.

Form 9-331
Dec. 1973

092508

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☒ gas well ☐ other

2. NAME OF OPERATOR
Raymond T. Duncan

3. ADDRESS OF OPERATOR
1777 S. Harrison St., P-1, Denver CO 80210

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1990' FSL & 1680' FWL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-12942

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
Bradford Canyon Unit

8. FARM OR LEASE NAME
Bradford Canyon Federal

9. WELL NO.
No. 1-23

10. FIELD OR WILDCAT NAME
Bradford Canyon

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 23-T37S-R24E

12. COUNTY OR PARISH: San Juan
13. STATE: UT

14. API NO.
43-037-30799

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5026' KB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) Dispose of Produced Water (NTL-2B)			

RECEIVED
SEP 18 1986
DIVISION OF
OIL, GAS & MINING

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Raymond T. Duncan requests your approval to dispose of produced waters from the above captioned well into the state-approved Hatch Salt Water Disposal Pit located in Section 13-T39S-R24E.

The Bradford Canyon Federal No. 1-23 produces only a trace of water each day from the Desert Creek Formation (Depth: 5432-54'). Because this well produces such a minute amount of water, a representative water analysis from the Bradford Canyon Federal No. 1-22 located in Sec. 22-37S-24E, San Juan Co., Utah, has been attached.

Duncan proposes to store the produced water in a 400-barrel tank and then truck the water to the Hatch Salt Water Disposal Pit.

A copy of this sundry has been sent to the State of Utah Division of Oil, Gas, and Mining for their approval.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED J. A. Bettridge TITLE Operations Supt. DATE September 9, 1986

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 9-23-86
BY: John R. Baza

Federal approval of this action is required before commencing operations.

*See Instructions on Reverse Side

COMPANY: DUNCAN, RAYMOND T UT ACCOUNT #N0360 SUSPENSE DATE:

WELL NAME: BRADFORD GVN 1-23

API #: 43037330799

SEC, TWP, RNG: 23 37S 24E

TELEPHONE CONTACT DOCUMENTATION

CONTACT NAME: ~~SHIRLEY~~ ~~WILL~~ ~~BRENDA~~

CONTACT TELEPHONE NO.: 1-303-7

SUBJECT: DUAL? Comm
WORKOVER IN

RESULTS: 3:10 7-28-88 SON

ISMV SI N
ALL REPORTED
CHANGE TO I
PUT OLS IN ISMV.

7-27-88
DON
WE HAVE THIS IN
THE COMPUTER AS 15-DC.
DO YOU AGREE OR
SHD IT BE ISMV &
DSCR. DUAL COMPLETION.

5432-44 DSCR
Recomplete to Ismay
5220-5224
5200-5240
ISMAY
5700
5210
5220
5224
5228
5320
5415
5432
5444
DSCR
5460

(Use attachments if necessary)

CONTACTED BY: 7-28-88 3:30 VLC

DATE:

COMPANY: DUNCAN, RAYMOND T UT ACCOUNT # N0360 SUSPENSE DATE:

WELL NAME: BRADFORD GYN 1-23

API #: 43037307 99

TELEPHONE CONTACT DOCUMENTATION

SEC, TWP, RNG: 23 37S 24E

CONTACT NAME: ~~SHIRLEY~~ ~~WELL~~ ~~BRENDA~~

CONTACT TELEPHONE NO.: 1-303-759-3303 JOHN BETTRIDGE

SUBJECT: DUAL? COMMINGLE?
WORKOVER IN 1984? NO

(Use attachments if necessary)

RESULTS: 3:10 7-28-88 SOMEONE WILL RETURN CALL.

ISMV SI NEVER PRODUCED-TEST PROD ONLY
ALL REPORTED PROD IS FROM DSCR.
CHANGE TO DUAL COMP IN COMPUTER.
PUT OLS IN ISMV.

(Use attachments if necessary)

CONTACTED BY: 7-28-88 3:30 VLC

DATE:

Form 3160-5
(November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
DEC 14 1989
DIVISION OF OIL, GAS & MINING

1. OIL WELL [X] GAS WELL [ ] OTHER	5. LEASE DESIGNATION AND SERIAL NO.: U-12942
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
	7. UNIT AGREEMENT NAME: Bradford Canyon Unit
2. NAME OF OPERATOR: Raymond T. Duncan	8. FARM OR LEASE NAME: Bradford Canyon
3. ADDRESS OF OPERATOR: 1777 S. Harrison St., P-1, Denver, CO 80210	9. WELL NO.: No. 1-23
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1990' FSL & 1680' FWL	10. FIELD AND POOL, OR WILDCAT: Bradford Canyon
	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 23-T37S-R24E
14. PERMIT NO.: 43-037-30799	15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5026' KB
	12. COUNTY OR PARISH: San Juan
	13. STATE: UT

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			
(Other) Cange to NTL-2B			[X]	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Raymond T. Duncan requests your approval to dispose of produced waters from the above captioned well into the Taos State SWD No. 1. Under the existing NTL-2b, Duncan disposes of water into the Hatch Salt Water Disposal Pit. All other provisions of the NTL-2B (approved 9/23/86) remain the same.

A copy of this sundry has been sent to the State of Utah, Division of Oil, Gas, and Mining for their approval.

Taos State SWD #25-34
SW SE Sec 25-37S-24E
San Juan County, UT

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 12-18-89
BY:

OIL AND GAS	
DRN	RJF
JRB	GLH
DTS	SLS
2-TAS	
3- MICROFILM	
4- FILE	

18. I hereby certify that the foregoing is true and correct

SIGNED J. A. Bettridge TITLE Operations Superintendent DATE December 5, 1989

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Federal Approval of this Action is Necessary

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

RECEIVED
AUG 16 1995
DIV OF OIL, GAS & MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.
Use APPLICATION FOR PERMIT— for such proposals.

6. Lease Designation and Serial Number: U-12942
7. Indian Allottee or Tribe Name: NA
8. Unit or Communitization Agreement: 8910204000
9. Well Name and Number: Bradford Canyon Federal 1-23
10. API Well Number: 4303730799
11. Field and Pool, or Wildcat: Bradford Canyon

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other (specify)
2. Name of Operator: Raymond T. Duncan
3. Address of Operator: 1777 S. Harrison, P-1
4. Telephone Number: (303) 759-3303
5. Location of Well
Footage 1990' FSL, 1680' FWL
QQ, Sec, T., R., M. : NESW 23-37S-24E
County : San Juan
State : UTAH

12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT (Submit in Duplicate)		SUBSEQUENT REPORT (Submit Original Form Only)	
[ ] Abandonment	[ ] New Construction	[ ] Abandonment *	[ ] New Construction
[ ] Casing Repair	[ ] Pull or Alter Casing	[ ] Casing Repair	[ ] Pull or Alter Casing
[ ] Change of Plans	[ ] Recompletion	[ ] Change of Plans	[ ] Shoot or Acidize
[ ] Conversion to Injection	[ ] Shoot or Acidize	[ ] Conversion to Injection	[ ] Vent or Flare
[ ] Fracture Treat	[ ] Vent or Flare	[ ] Fracture Treat	[ ] Water Shut-Off
[ ] Multiple Completion	[ ] Water Shut-Off	[ ] Other	
[X] Other Change of operator name			

Approximate Date Work Will Start: Upon approval from Utah Division of Oil, Gas & Mining

Date of Work Completion: _____

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.
* Must be accompanied by a cement verification report.

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Raymond T. Duncan requests a name change on the subject lease to Duncan Oil, Inc. Offices, personnel and all operations will continue to be the same as they have been for Raymond T. Duncan. Duncan Oil, Inc. will be responsible under the terms and conditions of the lease for operations conducted on the leased lands.

14. I hereby certify that the foregoing is true and correct

Name & Signature: Brenda Kelsch Title: Production Clerk Date: 8/14/95

(State Use Only)

(8/90)

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

FILE COPY

CORRECTED COPY

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [ ] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other Recomplete Ismay Zone

2. NAME OF OPERATOR
Raymond T. Duncan

3. ADDRESS OF OPERATOR
1777 So. Harrison, P-1, Denver, CO 80210

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)
At surface 1990' FSL: 1680' FWL
At top prod. interval reported below same
At total depth

43-037-30799

5. LEASE DESIGNATION AND SERIAL NO.
U-12942

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
Bradford Canyon Unit

8. FARM OR LEASE NAME
Bradford Canyon Federal

9. WELL NO.
1-23

10. FIELD AND POOL, OR WILDCAT
Undesignated

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 23-37S-24E

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
N/A	1/31/83	San Juan	UT

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)	19. ELEV. CASINGHEAD
PLEASE REFER TO ORIGINAL COMPLETION REPORT				

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
			→		

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)
Ismay: 5220-5224'; 5200-5210'

25. WAS DIRECTIONAL SURVEY MADE

26. TYPE ELECTRIC AND OTHER LOGS RUN
GR/CCL 5279-5000'

27. WAS WELL CORED

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
PLEASE REFER TO ORIGINAL COMPLETION REPORT					

RECEIVED
AUG 08 1983
DIVISION OF OIL, GAS & MINING

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8"	5320'	5320'

31. PERFORATION RECORD (*Interval, size and number*)
5220-5224' 2 JSPF, 9 holes
5200-5210' 2 JSPF, 20 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5220-5224'	500 gal. HCL + Add.
5200-5210'	3500 gal 15% MSR + Add.

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
7/13/83	Swab test	Shut in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
7/15/83	10	N/A		16	45	57	6750

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
swabbing	N/A		38	108	137	45.3

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)
Flared

TEST WITNESSED BY
Robert Knuckles

35. LIST OF ATTACHMENTS
N/A

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED John W. Lowry
John W. Lowry
TITLE Dist. Drlg. & Prod. Supt. DATE 8/4/83

See Spaces for Additional Data on Reverse Side

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

COPY

IN REPLY REFER TO:
UT-922

November 20, 1995

Raymond T. Duncan
1777 S. Harrison St. P-1
Denver, Colorado 80210

Re: Successor of Operator
Bradford Canyon Unit
San Juan County, Utah

Gentlemen:

On November 13, 1995, we received a sundry notice advising us that Duncan Oil, Inc. was the new operator for the Bradford Canyon Unit Agreement, San Juan County, Utah. We are returning the sundry notice for the change of operator unapproved.

Please use the attached forms of designation of successor unit operator. When resubmitting your application, we require four complete sets of indentures to be filed with one set containing original signatures which will be retained by this office. You may follow the self certification process outlined in the instructions for designation of successor unit operator which is enclosed for your information.

If you have any questions, please contact Teresa Thompson at (801) 539-4047.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks
Chief, Branch of Fluid Minerals

Enclosure

bcc: File - Bradford Canyon Unit
District Manager - Moab
Division of Oil, Gas & Mining
Agr. Sec. Chron.
Fluid Chron.

U922:TATHOMPSON:tt:11-20-95

RECEIVED
NOV 21 1995
DIV. OF OIL, GAS & MINING

COPY

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
UT-922

April 4, 1996

Duncan Oil, Inc.
Attn: Brenda Kelsch
1777 South Harrison Street
Denver, Colorado 80210

Re: Bradford Canyon Unit
San Juan County, Utah

Gentlemen:

We received an indenture dated December 1, 1995, whereby Raymond T. Duncan resigned as Unit Operator and Duncan Oil Inc. was designated as Successor Unit Operator for the Bradford Canyon Unit, San Juan County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective April 4, 1996. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Bradford Canyon Unit Agreement..

Your nationwide (Wyoming) oil and gas bond No. 0271 will be used to cover all operations within the Bradford Canyon Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks
Chief, Branch of Fluid Minerals

Enclosure

bcc: District Manager - Moab (w/enclosure)
Division of Oil, Gas & Mining
Division of Leasing Adjudication
File - Bradford Canyon Unit (w/enclosure)
MMS - Data Management Division
Agr. Sec. Chron
Fluid Chron

RECEIVED
APR 5 1996
DIV OF OIL, GAS & MINING

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

Routing:

1-LEC	7-SJ ✓
2-DTS/S	8-FILE
3-VLD	✓
4-RJF	✓
5-LEC	✓
6-FILM	✓

Attach all documentation received by the division regarding this change.
Initial each listed item when completed. Write N/A if item is not applicable.

☒ Change of Operator (~~well sold~~) ☐ Designation of Agent
☐ Designation of Operator ☐ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: **4-4-96**)

TO (new operator)	**DUNCAN OIL INC**
(address)	**1777 S HARRISON ST PH #1**
	DENVER CO 80210
	phone (**303**) **759-3303**
	account no. **N 6980**

FROM (former operator)	**DUNCAN, RAYMOND T**
(address)	**1777 S HARRISON ST PH #1**
	DENVER CO 80210
	phone (**303**) **759-3303**
	account no. **N 0360**

Well(s) (attach additional page if needed): ***BRADFORD CANYON UNIT**

Name: **BRADFORD CYN FED 1-23**	API: **43-037-30799**	Entity: **547**	Sec **23**	Twp **37S**	Rng **24E**	Lease Type: **U12942**
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:

OPERATOR CHANGE DOCUMENTATION

LEC 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). (Rec'd 8-16-95)

N/A 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form).

N/A 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) _____ If yes, show company file number: _____.

LEC 4. **(For Indian and Federal Wells ONLY)** The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of **Federal and Indian** well operator changes should take place prior to completion of steps 5 through 9 below.

LEC 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. (4-8-96)

LEC 6. Cardex file has been updated for each well listed above. (4-8-96)

LEC 7. Well file labels have been updated for each well listed above. (4-8-96)

LEC 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. (4-8-96)

LEC 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

– OVER –

OPERATOR CHANGE WORKSHEET (CONTINUED) Initial each item when completed. Write N/A if item is not applicable.

ENTITY REVIEW

Lec 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) ____ (If entity assignments were changed, attach copies of Form 6, Entity Action Form).

N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only)

N/A/Lec 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.

___ 2. A copy of this form has been placed in the new and former operators' bond files.

___ 3. The former operator has requested a release of liability from their bond (yes/no) ___. Today's date _____ 19___. If yes, division response was made by letter dated _____ 19___.

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

N/A 1. (Rule R615-2-10) The former operator/lessee of any **fee lease** well listed above has been notified by letter dated _____ 19___, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.

N/A 2. Copies of documents have been sent to State Lands for changes involving **State leases**.

FILMING

KDR 1. All attachments to this form have been microfilmed. Date: April 17 1996.

FILING

___ 1. Copies of all attachments to this form have been filed in each well file.

___ 2. The original of this form and the original attachments have been filed in the Operator Change file.

COMMENTS

951120 Blm/SL Rq. add'l info. from Duncan Oil Inc.

960404 Blm/SL Aprv. eff. 4-4-96.

WE71/34-35

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

N REPLY REFER TO
UT-922

June 22, 2001

Holcomb Oil & Gas, Inc.
P.O. Box 2058
Farmington, New Mexico 87499

Re: Bradford Canyon Unit
San Juan County, Utah

Gentlemen:

On June 18, 2001, we received an indenture dated December 1, 2000, whereby Duncan Oil, Inc. resigned as Unit Operator and Holcomb Oil and Gas, Inc. was designated as Successor Unit Operator for the Bradford Canyon Unit, San Juan County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective June 22, 2001. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Bradford Canyon Unit Agreement.

Your statewide (Utah) oil and gas bond No. 1227 will be used to cover all operations within the Bradford Canyon Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Teresa Thompson

for Robert A. Henricks
Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager - Moab (w/enclosure)
Division of Oil, Gas & Mining
Minerals Adjudication Group U-932
File - Bradford Canyon Unit (w/enclosure)
Agr. Sec. Chron
Fluid Chron

UT922:TAThompson:tt:6/22/01

Results of query for MMS Account Number 8910204000

Production	API Number	Operator	Well Name	Well Status	Lease or CA Number	Inspection Item	Township	Range	Section	Quart
Production	4303730799	DUNCAN OIL INCORPORATED	1-23 BRADFORD CANYON	PGW	UTU12942	8910204000	37S	24E	23	NESW
Production	4303731021	PETRAL EXPLORATION LLC	2-23 BRADFORD CYN UN	ABD	UTU12942	8910204000	37S	24E	23	SWNW

DISCLAIMER for online data: No warranty is made by the BLM for use of the data for purposes not intended by the BLM.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: U-14236

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER: Bradford Canyon 1-22

2. NAME OF OPERATOR: Duncan Oil, Inc.

9. API NUMBER: 4303730850

3. ADDRESS OF OPERATOR: 1777 S. Harrison, P-1 CITY Denver STATE CO ZIP 80210

PHONE NUMBER: (303) 759-3303

10. FIELD AND POOL, OR WILDCAT: Bradford Canyon

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 550' FNL & 1000' FEL

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENE 22 37S 24E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: _____	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☑ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
_____	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER: _____
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Duncan Oil, Inc. sold the subject well December 1, 2000 to:

Holcomb Oil & Gas
P O Box 2058
Farmington NM 87499

NAME (PLEASE PRINT) Brenda Kelsch TITLE Production Technician

SIGNATURE [signature] DATE 9/5/2001

(This space for State use only)

RECEIVED
SEP 10 2001
DIVISION OF
OIL, GAS AND MINING

(5/2000) (See Instructions on Reverse Side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU14236

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER: Bradford Canyon 1-22

2. NAME OF OPERATOR: Holcomb Oil and Gas, Inc.

9. API NUMBER: 4303730789 30850

3. ADDRESS OF OPERATOR: PO Box 2058 CITY Farmington STATE NM ZIP 87499-2058

PHONE NUMBER: (505) 326-0550

10. FIELD AND POOL, OR WILDCAT: Bradford Cyn

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1990 FS, 1600FW

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENE 22 37S 24E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☑ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER:
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Holcomb Oil and Gas, Inc. purchased the above well from Raymond T. Duncan.

RECEIVED
SEP 10 2001
DIVISION OF OIL, GAS AND MINING

NAME (PLEASE PRINT) W.J. Holcomb TITLE President

SIGNATURE W.J. Holcomb DATE 9/6/2001

(This space for State use only)

(5/2000) (See Instructions on Reverse Side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME: 8910204000

1. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER: Bradford Canyon 1-23

2. NAME OF OPERATOR: Holcomb Oil and Gas, Inc.

9. API NUMBER: 4303730799

3. ADDRESS OF OPERATOR: PO Box 2058 CITY Farmington STATE NM ZIP 87499-2058

PHONE NUMBER: (505) 326-0550

10. FIELD AND POOL, OR WILDCAT: Bradford Cyn

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 590 FN, 1000 FE

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 23 37S 24E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☑ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER:
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Holcomb Oil and Gas, Inc. purchased the above well from Raymond T. Duncan.

RECEIVED

NAME (PLEASE PRINT) W.J. Holcomb TITLE President

SIGNATURE W.J. Holcomb DATE 9/6/2001

(This space for State use only)

(5/2000) (See Instructions on Reverse Side)

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: U-12942

6. If Indian, Allottee or Tribe Name: N/A

7. If Unit or CA, Agreement Designation: N/A

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.: 1-23 Bradford Canyon

2. Name of Operator: Holcomb Oil and Gas, Inc.

9. API Well No.: 43-037-30799

3. Address and Telephone No.: P.O. Box 2058, Farmington, NM 87499 (505)326-0550

10. Field and Pool, or Exploratory Area:

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): Sec. 23-T37S-R24E, 1990' FSL, 1600' FWL

11. County or Parish, State: San Juan, Utah

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[ ] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other Vent Gas	[ ] Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

This is to notify and request permission to vent gas on the referenced well due to Aneth Plant shut-down as notified from Western Gas Resources due to pipeline failure. Once plant is back on line we will no longer vent gas. (Anticipated date is October 15, 2001)

Federal Approval Of This
Action Is Necessary

Accepted by the
Utah Division of
Oil, Gas and Mining
Date: 9/17/01
By: [signature]
Ext. Oct. 15, 2001

CC: State of Utah

COPY SENT TO OPERATOR
Date: 9-17-01
Initials: CHD

RECEIVED
SEP 11 2001
DIVISION OF
OIL, GAS AND MINING

14. I hereby certify that the foregoing is true and correct
Signed W. J. Holcomb (ast) Title W. J. Holcomb, Operator Date 9/7/01

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statemer

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: U-12942

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME: 8910204000

1. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER: Bradford Canyon Federal 1-23

2. NAME OF OPERATOR: Duncan Oil, Inc.

9. API NUMBER: 4303730799

3. ADDRESS OF OPERATOR: 1777 S. Harrison, P-1 CITY Denver STATE CO ZIP 80210

PHONE NUMBER: (303) 759-3303

10. FIELD AND POOL, OR WILDCAT: Bradford Canyon

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1990' FSL & 1680' FWL

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 23 37S 24E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: _____	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☑ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER: _____
_____	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Duncan Oil, Inc. sold the subject well December 1, 2000 to:

Holcomb Oil & Gas
P O Box 2058
Farmington NM 87499

NAME (PLEASE PRINT) Brenda Kelsch TITLE Production Technician

SIGNATURE _____ DATE 9/5/2001

(This space for State use only)

RECEIVED
SEP 10 2001
DIVISION OF
OIL, GAS AND MINING

(5/2000) (See Instructions on Reverse Side)

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING		
1. GLH		4-KAS
2. CDW ✓		5-LP ✓
3. JLT		6-FILE

Enter date after each listed item is completed

X Change of Operator (Well Sold) Designation of Agent

Operator Name Change (Only) Merger

The operator of the well(s) listed below has changed, effective: **12-01-2000**

FROM: (Old Operator):
DUNCAN OIL INC
Address: 1777 S. HARRISON, P-1
DENVER, CO 80210
Phone: 1-(303)-759-3303
Account N6980

TO: (New Operator):
HOLCOMB OIL AND GAS INC
Address: P O BOX 2058
FARMINGTON, NM 87499-2058
Phone: 1-(505)-326-0550
Account N0455

CA No. **Unit: BRADFORD CANYON**

WELL(S)

NAME	API NO.	ENTITY NO.	SEC. TWN RNG	LEASE TYPE	WELL TYPE	WELL STATUS
BRADFORD CANYON FEDERAL 1-22	43-037-30850	547	22-37S-24E	FEDERAL	OW	P
BRADFORD CANYON FEDERAL 1-23	43-037-30799	547	23-37S-24E	FEDERAL	OW	P

OPERATOR CHANGES DOCUMENTATION

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 09/10/2001
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 09/11/2001
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database on:** 09/11/2001
4. Is the new operator registered in the State of Utah: YES Business Number: 1288560-0143
5. If **NO**, the operator was contacted contacted on: N/A
6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the (merger, name change, or operator change for all wells listed on Federal or Indian leases on: N/A
7. **Federal and Indian Units:** The BLM or BIA has approved the successor of unit operator for wells listed on: 06/22/2001

8. **Federal and Indian Communization Agreements ("CA"):** The BLM or the BIA has approved the operator change for all wells listed involved in a CA on: N/A

9. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 09/11/2001
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 09/11/2001
3. Bond information entered in RBDMS on: N/A
4. Fee wells attached to bond in RBDMS on: N/A

STATE BOND VERIFICATION:

1. State well(s) covered by Bond No.: N/A

FEE WELLS - BOND VERIFICATION/LEASE INTEREST OWNER NOTIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed has furnished a bond: N/A
2. The **FORMER** operator has requested a release of liability from their bond on: N/A
   The Division sent response by letter on: N/A
3. (R649-2-10) The **FORMER** operator of the Fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

FEDERAL BOND VERIFICATION:

1. Federal well(s) covered by Bond No.: 1227

FILMING:

1. All attachments to this form have been **MICROFILMED** on:

FILING:

1. **ORIGINALS/COPIES** of all attachments pertaining to each individual well have been filled in each well file on:

COMMENTS:

Division of Oil, Gas and Mining

PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

☑ Well File ☐ Suspense ☐ Other

Bradford Canyon 1-23

(Loc.) Sec 23 Twp 37S Rng 24E (Return Date) _____

(API No.) 43-037-30799 (To-Initials) _____

1. Date of Phone Call: 9/12/01 Time: 9:50

2. DOGM Employee (name) DUSTIN DOUCET (☐ Initiated Call)

Talked to:

Name Wayne Townsend (☐ Initiated Call) - Phone No. (505) 599 6359

of (Company/Organization) BLM

3. Topic of Conversation: Gas Flaring in Aneth area due to - bad Western Gas Resources Pipeline

4. Highlights of Conversation: Wayne has had several meetings with Navajo Nation, Navajo Epa, Navajo minerals, Navajo Health and Human Services, the Department of Justice, US EPA, Texaco, Exxon-Mobil, Western Gas & the Red Mesa & Aneth Chapters. 12.5 miles of pipeline (downstream from Aneth Plant) no good. Options: a) rebuild 12.5 miles of pipeline - ROW expires 2005 western's renegotiation with Navajo to extend ROW was denied [main choice], 1 month to rebuild once OK given from Navajo etc. b) Use 20" Questar oil pipeline [1950's - no go] c) Use 6" Conoco Line - convert to gas and truck liquids from plant - talks broke down 9/7/01. Everyone in agreement to keep wells producing - some verbal complaints from public, nothing in writing yet. Red Mesa & Aneth Chapters wanted full shut-in. Current plan: EPA sending Letter today to flare gas thru Plant (Gas will be metered). The gas will be counted as cost gas - no royalty due - because out of control of companies (producers). H_2S and other safety monitors will be set up around plant and monitor health risks, etc. BLM Has approved all flaring until Oct. 15, 2001 associated w/ this matter. Probably won't be back into operation before then though.

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
U-12942

6. If Indian, Allottee or Tribe Name
N/A

7. If Unit or CA/Agreement, Name and/or No.
N/A

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
Bradford Canyon 1-23

2. Name of Operator
Holcomb Oil and Gas, Inc.

9. API Well No.
43-037-30799

3a. Address
P. O. Box 2058, Farmington, NM 87499-2058

3b. Phone No. *(include area code)*
(505)326-0550

10. Field and Pool, or Exploratory Area

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec. 23-T37S-R24E
1990' FSL, 1600' FWL

11. County or Parish, State
San Juan Utah

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Vent Gas
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Please be advised that as of Tuesday, November 20, 2001 the referenced well will be put back on line for gas sales through Western Gas Resources repaired gas line.

CC: State of Utah

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
W. J.Holcomb — Title President

Signature — Date 11/19/01

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

RECEIVED
NOV 23 2001
DIVISION OF OIL, GAS AND MINING

Approved by — Title — Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. — Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

IN REPLY REFER TO
3180
UT-922

DJ Simmons, Inc.
Attention: John A. Byrom
1009 Ridgeway Place, Suite 200
Farmington, NM 87401

Re: Bradford Canyon Unit (UTU63082X)
San Juan County, Utah

Gentlemen:

On August 11, 2006, we received an indenture dated June 1, 2006, whereby Holcomb Oil and Gas Company, Inc. resigned as Unit Operator and D. J. Simmons is designated as Successor Unit Operator for the Bradford Canyon Unit, San Juan County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective August 16, 2006. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under Bradford Canyon Unit Agreement.

Your Statewide (Utah) Oil and Gas Bond, No. UTB000048 will be used to cover all Federal operations within the Bradford Canyon Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Douglas Cook

Douglas Cook
Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager Monticello (w/enclosure)
SITLA
Division of Oil, Gas & Mining
Dockets
File - Bradford Canyon Unit (w/enclosure)
Agr. Sec. Chron
Reading File
Central Files

UT922:CSeare:cs:08/16/06

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. DJJ
2. CDW

X Change of Operator (Well Sold) Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective: **6/1/2006**

FROM: (Old Operator):	**TO:** (New Operator):
N0455-Holcomb Oil & Gas, Inc.	N2520-D J Simmons, Inc.
PO Box 2058	1009 Ridgeway Pl
Farmington, NM 87499	Farmington, NM 87401-2092
Phone: 1 (505) 326-0550	Phone: 1 (505) 326-3753

CA No. **Unit:** **BRADFORD CANYON**

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
BRADFORD CYN FED 1-23	23	370S	240E	4303730799	547	Federal	OW	S

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 9/28/2006
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 9/25/2006
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 9/28/2006
4a. Is the new operator registered in the State of Utah: YES Business Number: 1231074-0143
4b. If **NO**, the operator was contacted contacted on:
5a. (R649-9-2)Waste Management Plan has been received on: Requested
5b. Inspections of LA PA state/fee well sites complete on: n/a
5c. Reports current for Production/Disposition & Sundries on: ok
6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM n/a BIA
7. **Federal and Indian Units:**
   The BLM or BIA has approved the successor of unit operator for wells listed on: 8/18/2006
8. **Federal and Indian Communization Agreements ("CA"):**
   The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
9. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: n/a

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 9/28/2006
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 9/28/2006
3. Bond information entered in RBDMS on: n/a
4. Fee/State wells attached to bond in RBDMS on: n/a
5. Injection Projects to new operator in RBDMS on: n/a
6. Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: UTB000048
2. Indian well(s) covered by Bond Number: n/a
3. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number n/a

a. The **FORMER** operator has requested a release of liability from their bond on: n/a
   The Division sent response by letter on: n/a

LEASE INTEREST OWNER NOTIFICATION:

4. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

COMMENTS:

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER: U-12942

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME: Bradford Canyon

1. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER: Bradford Canyon 1-23

2. NAME OF OPERATOR: DJ Simmons, Inc.

9. API NUMBER: 4303730799

3. ADDRESS OF OPERATOR: 1009 Ridgeway Place CITY Farmington STATE NM ZIP 874012092

PHONE NUMBER: (505) 326-3753

10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1990 FSL., 1600 FWL

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 23 37S 24E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: _____	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☑ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
_____	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER: _____
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Holcomb Oil and Gas Company,Inc. resigned as Unit Operator and DJ Simmons, Inc. is designated as Successor Unit Operator for Bradford Canyon Unit, San Juan County, effective June 1, 2006

DJ Simmons, Inc. Statewide (Utah) Oil and Gas Bond No. UTUB000048 will be used to cover all Federal operations within the Bradford Canyon Unit.

RECEIVED
OCT 02 2006
DIV. OF OIL, GAS & MINING

faxed 9/25/06

NAME (PLEASE PRINT) John A. Byrom TITLE President

SIGNATURE _____ DATE 9/25/2006

(This space for State use only)

APPROVED 9/28/06
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

(5/2000) (See Instructions on Reverse Side)

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER:

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME: 8910204000

1. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER: Bradford Canyon 1-23

2. NAME OF OPERATOR: Holcomb Oil and Gas, Inc. N0455

9. API NUMBER: 4303730799

3. ADDRESS OF OPERATOR: PO Box 2058 CITY Farmington STATE NM ZIP 87499

PHONE NUMBER: (505) 326-0550

10. FIELD AND POOL, OR WILDCAT: ISMY/DSCR

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1990' FSL 1600' FWL

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 23 37S 24E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: _____	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☑ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
_____	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER: _____
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Change of operator effective June 1, 2006, from Holcomb Oil and Gas, Inc. to DJ Simmons, Inc.

NAME (PLEASE PRINT) WJ Holcomb TITLE President

SIGNATURE _____ DATE 9/25/2006

(This space for State use only)

APPROVED 9/28/06

Earlene Russell

Division of Oil, Gas and Mining

Earlene Russell, Engineering Technician

(5/2000) (See Instructions on Reverse Side)

RECEIVED

SEP 2 8 2006

DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: U-12942

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME: Bradford Canyon

1. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER: Bradford Canyon Federal 1-23

2. NAME OF OPERATOR: DJ Simmons, Inc.

9. API NUMBER: 4303730799

3. ADDRESS OF OPERATOR: 1009 Ridgeway Place CITY Farmington STATE NM ZIP 87401

PHONE NUMBER: (505) 326-3753

10. FIELD AND POOL, OR WILDCAT: Bradford Canyon

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1900' FSL x 1600' FEL

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 23 37S 24E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: 3/1/2008	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER: See below
	☐ CONVERT WELL TYPE	☑ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

It is intended to permanently plug and abandon the Desert Creek formation in the subject well. The well will then be recompleted to the lower Ismay, Upper Ismay and Hermosa formations according to the attached procedure and wellbore diagram. Estimated start date March 1, 2008.

RECEIVED
DEC 26 2007
DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) Rodney L. Seale TITLE Operations Manager

SIGNATURE Rodney L. Seale DATE 12/19/2007

(This space for State use only)

Accepted by the Utah Division of Oil, Gas and Mining
Date: 1/2/2008
By:

Federal Approval Of This Action Is Necessary

COPY SENT TO OPERATOR
Date: 1-3-2008
Initials: RS

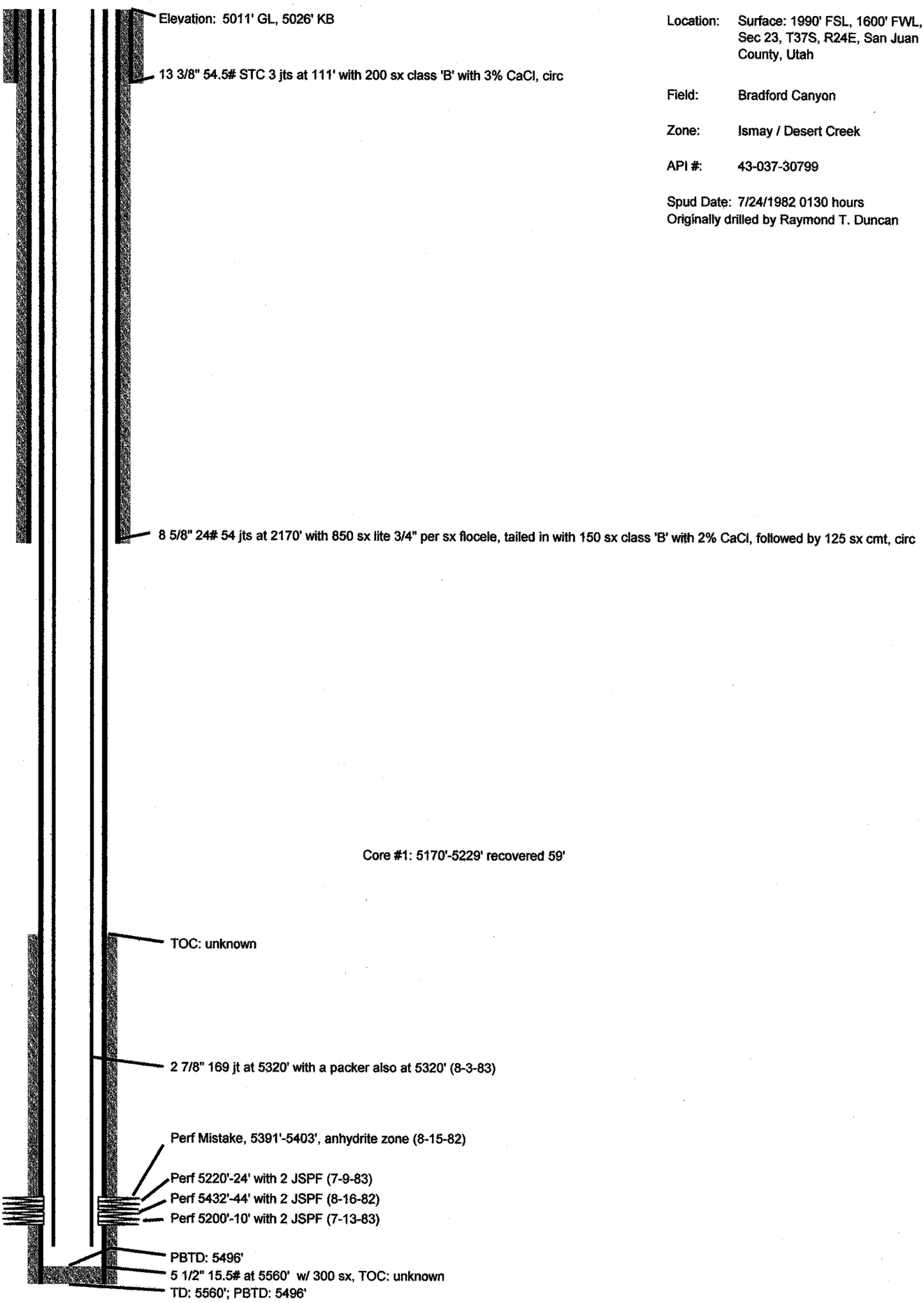
(5/2000) (See Instructions on Reverse Side)

Bradford Canyon No. 1-23
Recompletion Procedure
November 29, 2007

- Permanently abandon the Desert Creek section perforations of 5432' ot 5444' with a wireline set cast iron bridge plug set at 5425' with 2sacks of cement dump bailed on top.
- Cement squeeze under a cement retainer the Upper Ismay perforations from 5200' to 5224' with 100sx cement.
- Drill out cement and pressure test casing and perforations to 500psi.
- Run cement bond log from 5400' plug back total depth to top of cement or the intermediate casing shoe at 2170' which ever is the deepest depth.
- Perforate Lower Ismay & adjacent shale from 5340' to 5385'.
- Sand water foam frac Lower Ismay & adjacent shale from 5340' to 5385' with 15,000 gallons, 785,000 scf nitrogen and 75,000 pounds 20/40 mesh sand.
- Flowback and test perforations for productivity.
- Temporarily abandon the Lower Ismay and adjacent shale with a cast iron bridge plug set at 5180'.
- Perforate Upper Ismay over selectively over 4872' to 5052'.
- Test the selected zones and acidize or frac as indicated with 20,000 gallons nitrogen foamed water using 1.2 million scf of nitrogen and 130,000 pounds of 20/40 mesh sand.
- Flowback and test perforations for productivity.
- Temporarily abandon the Upper Ismay with a cast iron bridge plug set at 4850'.
- Perforate the Hermosa section selectively over 4697' to 4813'.
- Test the selected zones and acidize or frac as indicated with 18,000 gallons nitrogen foamed water using 1 million scf of nitrogen and 110,000 pounds of 20/40 mesh sand.
- Flowback and test perforations for productivity.
- Drill out the temporary cast iron bridge plugs at 4850' and 5180'.
- Clean up zones.
- Run production tubing and return well to active status.

DJ SIMMONS, INC.

Bradford #1-23



Location: Surface: 1990' FSL, 1600' FWL, Sec 23, T37S, R24E, San Juan County, Utah

Field: Bradford Canyon

Zone: Ismay / Desert Creek

API #: 43-037-30799

Spud Date: 7/24/1982 0130 hours
Originally drilled by Raymond T. Duncan

8/16/1982 Acidize 5432'-44' with 750 gal 15% HCl, 15,000 gal 28% HCl, 15,000 gal H2O, and 591,000 scf N2 @ 2 BPM
7/13/1983 Acidize 5200'-10' with 3500 gal 15% MSR

Sketch

Derick Lucas

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: U-12942

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

7. UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER: Bradford Canyon Federal 1-23

2. NAME OF OPERATOR: D J Simmons, Inc.

9. API NUMBER: 4303730799

3. ADDRESS OF OPERATOR: 1009 Ridgeway Pl, Suite 200 CITY Farmington STATE NM ZIP 87401

PHONE NUMBER: (505) 326-3753

10. FIELD AND POOL, OR WILDCAT: Bradford Canyon

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1990' FSL x 1600' FWL

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 23 37S 24E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER:
	☐ CONVERT WELL TYPE	☑ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

D.J. Simmons, Inc. applied by Sundry Notice on 12/19/07 and approved on 1/2/08 D.J. Simmons, Inc. by this Sundry Notice still plans on re-completing this well in accordance with the previous Sundry Notice but the schedule has changed to sometime in 2009 depending upon weather and rig availability.

NAME (PLEASE PRINT) Steve Sacks TITLE Permitting Specialist

SIGNATURE Steve Sacks DATE 9/24/2008

(This space for State use only)

RECEIVED
SEP 29 2008
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-12942

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: BRADFORD CANYON

1. TYPE OF WELL: Oil Well

8. WELL NAME and NUMBER: BRADFORD CYN FED 1-23

2. NAME OF OPERATOR: D J SIMMONS, INC

9. API NUMBER: 43037307990000

3. ADDRESS OF OPERATOR: 1009 RIDGEWAY PL, STE 200 , FARMINGTON, NM, 87401

PHONE NUMBER: 505 326-3753 Ext

9. FIELD and POOL or WILDCAT: BRADFORD CYN

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2072 FSL 1538 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 23 Township: 37.0S Range: 24.0E Meridian: S

COUNTY: SAN JUAN

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 2/28/2014	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Sidetrack to Recomplete

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

D. J. Simmons, Inc. proposed to sidetrack from the existing Bradford Canyon 1-23 wellbore to the following new bottom hole location: 2,500' FNL & 2,000 FW:, Sec. 23, T37S, R24E Please see attached Sidetrack Drilling Procedure, Sidetrack Drilling Program, 3,000psi Drilling Rig BOP System, Drilling Equipment Layout Plan, Utah Well Location Plat, Directional Drilling Letter & Approved BLM Sundry.

Surf
654269X
4157780Y
37.554131
-109.253488

Federal Approval of this Action is Necessary

BHL
654373X
4158029Y
37.556359
-109.252264

Approved by the Utah Division of Oil, Gas and Mining

Date: 10-28-13

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Chris S. Lopez	505 326-3753	Regulatory Secialist
SIGNATURE N/A		**DATE** 9/19/2013

RECEIVED: Sep. 19, 2013

UTAH WELL LOCATION PLAT

OPERATOR DJ SIMMONS INC.

LEASE BRADFORD CANYON WELL NO. 1-23S

SECTION 23 TOWNSHIP 37 SOUTH RANGE 24 EAST S.L.M.

COUNTY SAN JUAN UTAH

FOOTAGE LOCATION OF WELL: 1978.09' FEET FROM THE SOUTH LINE and

1645.48' FEET FROM THE WEST LINE and

GROUND LEVEL ELEVATION: 5003.27'

SURFACE USE WITHIN 200' RADIUS: No Improvements Within 200'

BASIS OF BEARING: GPS Data

BASIS OF ELEVATION: GPS Data – NAD 83 – PDOP #1.4

500' 500'

1" = 1000'

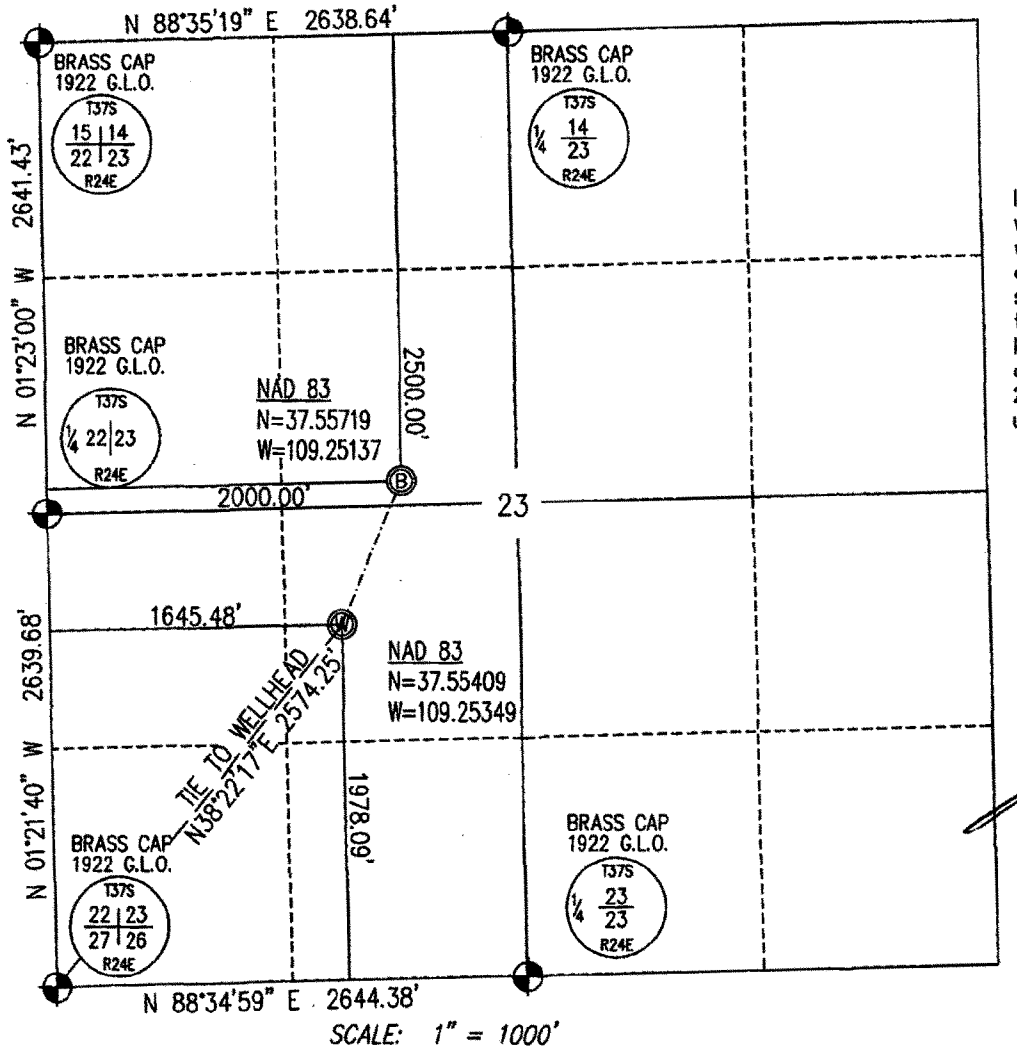
Some information on this plat is based on information taken from previous surveys, record information, or collatoral evidence and may not reflect that which may be disclosed by a complete boundary survey. This plat is not to be relied on for the establishment of surface boundaries, fences, buildings, or other future improvements.

BRASS CAP

WELL Location

BOTTOM HOLE

NOTE: THE LOCATION OF THE BOTTOM HOLE IS CALCULATE.



SCALE: 1" = 1000'

I hereby certify that the proposed well location shown on this plat was prepared from field notes of an actual survey by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief, and that there are no visible improvements within 200 feet of this proposed wellhead, unless noted otherwise.

LICENSED PROFESSIONAL SURVEYOR
No. 171252
JOHN D. WAYNE
STATE OF UTAH

John D. Wayne
Professional L.S. #171252
State of Utah

AUGUST 1, 2013
Date Surveyed:

AUGUST 21, 2013
Date Platted (Revised):

RECEIVED: Sep. 19, 2013

DJ SIMMONS, INC.

1009 Ridgeway Place
Suite 200
Farmington,
New Mexico 87401

505-326-3753
505-327-4659 FAX
info@djsimmonsinc.com
www.djsimmonsinc.com

September 16, 2013

Ms. Diana Mason
State of Utah
Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salta Lake City, UT 84114-5801

Re: Directional Drilling R649-3-11
Bradford Canyon 1-23S: 1,978' FSL & 1,645' FWL (Surface Hole), NE/SW
2,500' FNL & 2,000' FWL (Bottom Hole), SE/NW
Section 23, T37S, R24E, SLM
San Juan County, UT

Dear Ms. Mason,

Pursuant to the filing of a Notice of Intent Sundry regarding the above referenced well on September 16, 2013, D. J. Simmons, Inc. (DJS) is hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- The Bradford Canyon 1-23S is located within the Bradford Canyon DC PX A Unit.
- DJS is requesting to sidetrack out of the existing Bradford Canyon 1-23 wellbore in order to minimize surface disturbance. Locating the well at the surface location and drilling directionally from this location, DJS will be able to utilize the existing wellpad, access road and pipelines in the area.
- Furthermore, DJS hereby certifies that it is the sole working interest owner within 460 feet of the entire directional wellbore.

Therefore, based on the above state information, DJS respectfully requests that the NOI Sundry be granted pursuant to 649-3-11.

Sincerely yours,

Chris S. Lopez

Chris S. Lopez
Regulatory Specialist

RECEIVED: Sep. 19, 2013

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
440 West 200 South, Suite 500
Salt Lake City, UT 84101

IN REPLY REFER TO:
3160
(UT-922)

October 25, 2013

Memorandum

To: Assistant Field Office Manager Resources,
Moab Field Office

From: Michael Coulthard, Petroleum Engineer

Subject: 2013 Plan of Development Bradford Canyon Unit, San Juan County, Utah.

Pursuant to email between Eric Jones, Moab Field Office, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well has been resurveyed and the surface location adjusted (please see our memo dated May 17, 2013).

API #	WELL NAME	LOCATION
43-037-30799	Bradford Canyon 1-23	Sec 23 T37S R24E 1978 FSL 1645 FWL BHL Sec 23 T37S R24E 2500 FNL 2000 FWL

Our records have been noted to reflect the change.

Michael Coulthard Digitally signed by Michael Coulthard
DN: cn=Michael Coulthard, o=Bureau of Land Management, ou=Division of Minerals, email=mcoulth@blm.gov, c=US
Date: 2013.10.25 12:18:11 -06'00'

bcc: File - Bradford Canyon Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:10-25-13

D.J. SIMMONS INC.

Bradford Canyon No. 1-23S
Surface Location: 1978' FSL, 1645' FWL
Bottomhole Location: 2500' FNL, 2000' FWL
Sec. 23 T-37-S R-24-E
San Juan County, Utah

Sidetrack Drilling Program

1. ESTIMATED FORMATION TOPS: (GL: 5,003', KB: 5,015')

Formation Name	Depth TVD	Sub Sea Depth TVD
Morrison Formation	Surface	5015
Entrada Sandstone	220	4795
Navajo Sandstone	440	4575
Chinle Formation	1310	3705
Moenkopi Formation	2125	2890
Cutler Group	2306	2709
Honaker Trail Formation	4056	959
Upper Ismay	5089	-74
Desert Creek	5362	-347
Total Depth	5505	-490

2. NOTABLE ZONES

Formation Name	Depth TVD	Contents
Morrison Formation	Surface	Mixed sand, shale, siltstone
Entrada Sandstone	220	Sandstone, water possible
Navajo Sandstone	440	Sandstone, water possible
Chinle Formation	1310	Red/vari-color shale/siltstone
Moenkopi Formation	2125	Red-brown shale, siltstone
Cutler Group	2306	Red Arkose sandstone
Honaker Trail Formation	4056	Limestone, sandstone, gas and water possible
Upper Ismay	5089	Limestone, anhydrite, oil, gas, water possible
Desert Creek	5362	Limestone, anhydrite, oil, gas, water possible
Total Depth	5505	Paradox salt

Water zones will be protected with casing, cement, and weighted mud. Fresh water found while drilling will be recorded. Oil or gas shows will be tested for commercial potential based on the evaluation of data recovered during drilling.

3. PRESSURE CONTROL:

Maximum expected pressure is 2800 psi. The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A diagram of a typical 11" 3,000 psi model BOP is attached.

BOP equipment and all accessories will meet or exceed BLM requirements in 43 CFR Part 3160 for a 3000 psi system. A 3000 psi double ram hydraulic BOP. Accumulator system capacity will be sufficient to close all BOPE with a 50% safety factor. Fill, kill, and choke manifold lines will be 2". Accessories will include upper and lower Kelly cocks with handles, stabbing valve to

D.J. SIMMONS INC.
Bradford Canyon No. 1-23S
Surface Location: 1978' FSL, 1645' FWL
Bottomhole Location: 2500' FNL, 2000' FWL
Sec. 23 T-37-S R-24-E
San Juan County, Utah

fit drill pipe on floor at all times, 3000 psi choke manifold with 2" adjustable and 2" positive chokes, and pressure gauge (diagrams attached). BOP rams will be cycled every 24 hours. Tests will be recorded on IADC log.

4. CASING & CEMENT

Hole Size	O.D.	Weight (lb/ft)	Grade	Age	Connection	GL Setting Depth
17 ½"	13 3/8"	54.5#	J55	**Existing**	ST&C	GL– 111'
12 1/4"	8 5/8"	24#	J55	**Existing**	ST&C / LT&C	GL – 2170'
7 7/8"	5 ½"	17#	N80	New	LT&C	GL – 5505'TVD

Production casing will be cemented to ensure cement coverage inside the intermediate casing. **Lead cement**: ~ 1790 cu. ft. (890 sx) and **Tail cement**: ~ 190 cu.ft. (150 sx). Volumes are calculated at 50% excess. A wiper plug will be displaced to the float collar leaving the shoe joint full of cement. A cement bond log will be run during completion operations to insure cement coverage. Casing will be pressure tested to 3000 psi for 30 minutes during completion operations.

Cement recipe **(Lead)**: Premium Lite High Strength FM w/2% KCl, ¼#/sx Cello flake, 0.2% CD-32, 3#/sx LCM-1, 0.5% FL-52, or equal, mixed at 10.32 gps, 12.5 ppg for a yield of 2.01 cu. ft. per sx. Volume based on 50% excess.

Cement recipe **(Tail)**: Type III cmt or equivalent (1.27 ft3/sx yield, 15.2 ppg, & 5.8 gps) with 2% CaCl2 and ¼#/sx cellophane. Volume based on 50% excess.

Cementing equipment will include a float shoe, float collar and will be run with a centralized shoe joint and next five joints. Centralizers will also be run across the producing zones.

5. MUD PROGRAM

Depth TVD	Type	Wt./ppg.	Vis.	Fluid Loss	PH
2170'-3900'+/-	FW gel/Polymer/LSND	8.3-8.9	30-55	as needed	9.5
3900'-5505'+/-	FW gel/Polymer/LSND	8.3-8.9	30-55	<10cc's	9.5

Lost circulation and absorption material will be on location.

D.J. SIMMONS INC.
Bradford Canyon No. 1-23S
Surface Location: 1978' FSL, 1645' FWL
Bottomhole Location: 2500' FNL, 2000' FWL
Sec. 23 T-37-S R-24-E
San Juan County, Utah

6. CORING, TESTING, & LOGGING

Drill stem tests may be run on Ismay and Desert Creek drilling breaks. Drill stem tests will be conducted during daylight hours only. Sidewall core samples may be taken from selected sections over productive sections from Honaker Trail to TD. Whole core may be taken across the Hovenweep and Gothic formations. A full suite of open hole logs may be run, possibly in multiple trips, from TD to 2170' with gamma ray and neutron to surface. This well will be mud logged from 3900' to TD.

7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, or hydrogen sulfide are expected. Maximum pressure will be 2800 psi.

8. OTHER INFORMATION

The anticipated spud date is February 28, 2014. It is expected it will take ~15 days to drill and ~20 days to complete the well. Completion will start about one month after the spud and may include hydraulic fracturing.

Prepared By:

Rodney L. Seale
Operations Engineer

Date: September 7, 2013

RECEIVED: Sep. 19, 2013

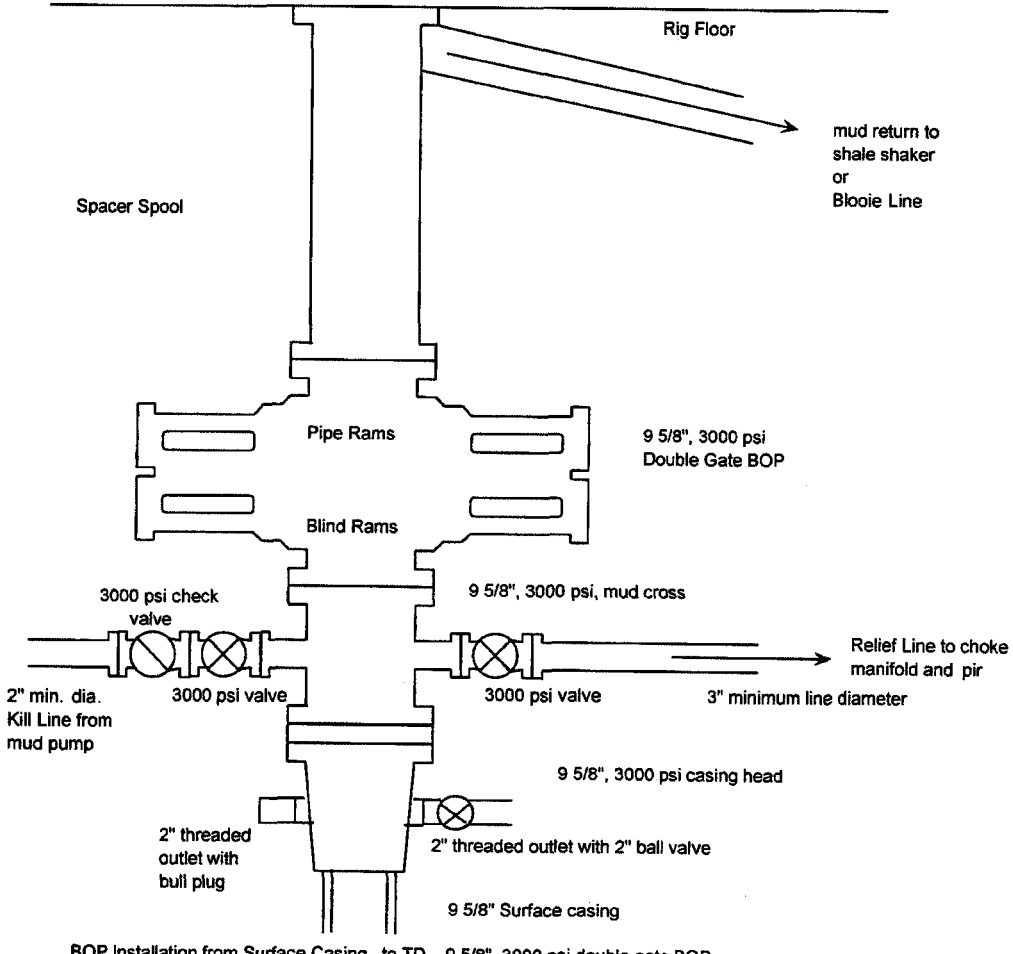
D.J. SIMMONS INC.
Bradford Canyon No. 1-23S
Surface Location: 1978' FSL, 1645' FWL
Bottomhole Location: 2500' FNL, 2000' FWL
Sec. 23 T-37-S R-24-E
San Juan County, Utah

Sidetrack Drilling Procedure

- Back drag and clean location for crew & rig safety. Build 70' x 40' x 8' reserve pit with 5' weir. Install plastic liner and fence around pit.
- Move in well service unit and rig up.
- Nipple down wellhead and nipple up BOP.
- Trip out of hole with 169 joints 2 7/8" tubing string and packer set at 5320'.
- Round trip bit and scraper to bottom perf at 5444'.
- Set CIBP at 5390' and dump bail 3sx cement on top.
- Set CIBP at 5170' and dump bail 3sx cement on top.
- Run cement bond log to locate top of cement and good 5 1/2" casing cut off point.
- If cement top is above Hermosa top, trip in hole with 2 7/8" tubing to 4153'.
- Spot 15.8 ppg cement to cover from 4153' to 3977' with 20sx (23.6 cuft, 176' of cement).
- Rig down and move out well service rig. Move in and rig up drilling rig. We may start with drilling rig instead of well service rig depending on availability.
- Nipple up BOP, manifold and flowlines. Test blind rams, pipe, inside valves, outside valves, floor valve, kelly valve, fillup check valve and manifold valve to 250psi low and 1,500 psi high. Test casing to 500 psi for 30 minutes. Record test in IADC book and sign as witness.
- Chose a 5 1/2" casing cut off point at top cement and cut and pull 5 1/2" casing.
- Sting into 5 1/2" casing stub and spot a 15.8ppg cement plug from 50' below top of 2nd stage cement to fill open hole to 50' above 5 1/2" casing stub.
- Wait on cement and tag plug.
- Set a hardened 250' cement kick off plug from 2400' up to 2150'. If 5 1/2" casing stub is in the 8 5/8" casing, set a whipstock tool to cut a window.
- Establish a 300' radius turn to 20^0 deviation from vertical at 27^0 from north. Maintain 20^0 from vertical at 27^0 degrees from north. Return to vertical with a 300' radius turn to achieve a total vertical displacement of 885' by 5000' TVD seeking a BHL of 2500' FNL, 2000' FWL at a TVD of 5505' and approximate MD of 6405'.
- At 3900' TVD, switch to clean mud pits and mix LSND mud to 30-32 vis and 6 water loss. Maximize the use of shale shaker and desilter to control mud weight. Use dilution from reserve 1st and rig supply tank 2nd to maintain mud weight at 9.0 ppg or below.
- Run tests, pull cores and logs as hole conditions dictate.
- Run 5 1/2" N80 LTC casing to within 5' of bottom and cement to tieback to intermediate casing.

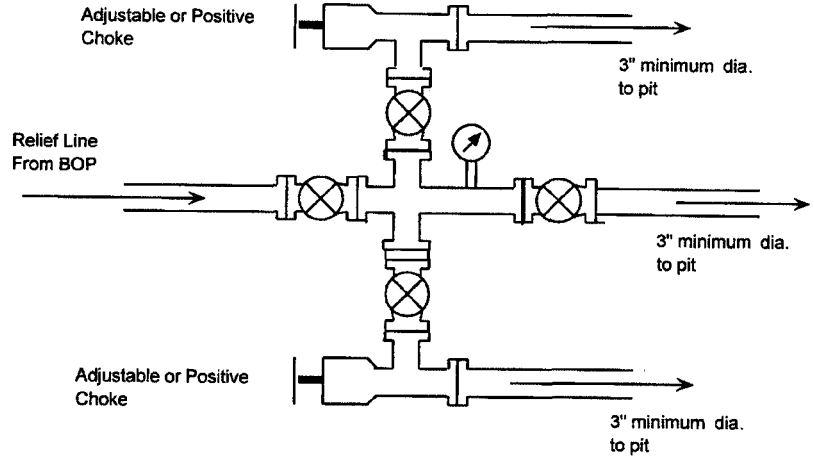
Bradford Canyon 1-23S
3,000 psi Drilling Rig BOP System

Figure 1 9 5/8", 3000 psi Drilling Rig BOP System

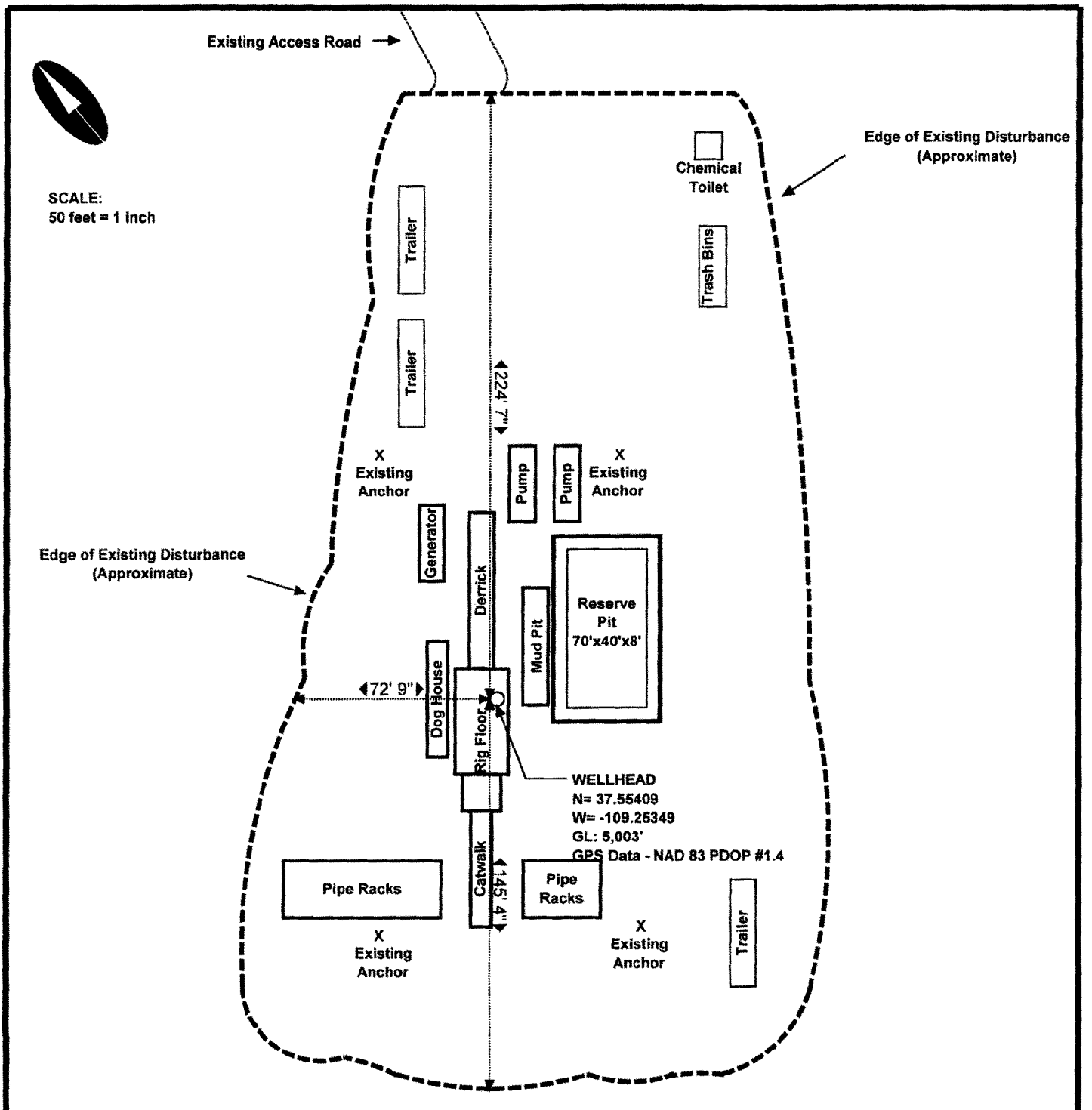


BOP Installation from Surface Casing to TD . 9 5/8", 3000 psi double gate BOP equipped with blind and pipe rams and rotating head. All equipment rated at 3000 psi or greater working pressure.

Figure 2



Choke manifold for BOP system shown in Figure 3.
All equipment to be rated at 3000 psi or greater.



D. J. SIMMONS, Inc.
1009 Ridgeway Place, Ste. 200
Farmington,NM 87401
Phone (505) 326-3753
Fax (505) 327-4659
DJ SIMMONS, INC.

Reviewed By: Craig D. Starkey
Drawn By: Chris S. Lopez
Approved By: Rodney L. Seale
Date: Sept. 19, 2013

Bradford Canyon 1-23S
Drilling Equipment Layout Plan
NE/SW Sec. 23, T37S, R24E
1,978' FSL & 1,645' FWL
San Juan County, UT

RECEIVED: Sep. 19, 2013

Form 3160-5
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

1. Type of Well ☑ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. U-12942
	6. If Indian, Allottee or Tribe Name. N/A
	7. If Unit of CA/Agreement, Name and/or No. Bradford Canyon
	8. Well Name and No. Bradford Canyon 1-23
2. Name of Operator D. J. Simmons, Inc.	9. API Well No. 43-037-30799
3a. Address 1009 Ridgeway Place, Suite 200 Farmington, NM 87401 3b. Phone No. *(include area code)* (505) 326-3753	10. Field and Pool or Exploratory Area Bradford Canyon
4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* Surface: 1,990' FSL & 1,600' FWL NE/SW Section 23, T37S, R24E, SLM	11. County or Parish, State San Juan County, Utah

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other Sidetrack
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

D. J. Simmons, Inc. proposes to sidetrack from the existing Bradford Canyon 1-23 wellbore to the following new bottom hole location:

2,500' FNL & 2,000' FWL, Section 23, T37S, R24E, SLM

Please see attached Sidetrack Drilling Procedure, Sidetrack Drilling Program, 3,000 psi Drilling Rig BOP System, Wellbore Sketches, Existing Wellpad Disturbance Survey, and Drilling Equipment Layout Plan.

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)* Chris S. Lopez	Title Regulatory Specialist
Signature Chris S. Lopez	Date 05/03/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Lisa Bryant	Title Acting Field Manager	Date 5-28-13
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office Moab Field Office	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

CONDITIONS OF APPROVAL ATTACHED

RECEIVED: Sep. 19, 2013

DJ Simmons, Inc.
Re-Entry: Plug-Back, Sidetrack, Directionally Drill to a New Bottom-Hole Location
Bradford Canyon 1-23
Bradford Canyon Unit, UTU63082A
Lease UTU12942
Location, Surface: NE/SW Section 23, T37S, R24E
Bottom-Hole: SE/NW Section 23, T37S, R24E
San Juan County, Utah

CONDITIONS OF APPROVAL

1. Notify Jeff Brown (435-459-4886 cell, or 435-587-1525 office) of the BLM Monticello Field Office at least 24 hours prior to initiating well operations.

2. Concurrent approval from the State of Utah, Division of Oil, Gas & Mining (DOGM) is required before conducting any surface disturbing activities.

3. During plug-back of the existing well bore, bridge plugs must be capped with at least 35 feet of dump bailed cement or at least 50 feet of cement that is placed by another method.

4. Gelled water spacer, mixed at 9 pounds-per-gallon, must be placed between the plugs in the portion of the well bore being plugged-back. This may be done after the bridge plugs are set

5. The proposed well control equipment is appropriate for anticipated conditions. Well control equipment for the production section of the well shall meet or exceed 2M standards. Installation, testing and operation of the system shall be in conformance with Onshore Oil and Gas Order No. 2.

6. Drilling reports, which describe the activities of each day, shall be submitted to the BLM Moab Field Office on a weekly, or more frequent, basis. In addition to a daily summary of activities, drilling reports shall include the drilling fluid weight, details of casing and cement, water flows, lost circulation zones and any other information that would contribute to our understanding of drilling conditions.

7. A cement bond log, or other appropriate tool, shall be used to verify the top of cement behind the production casing. If cementing objectives are not met, remedial cementing may be necessary.

8. If a well control issue arises (e.g. kick, blowout, or water flow), casing failure occurs, or an increase in bradenhead pressure occurs during fracturing operations, the BLM shall be notified within 24 hours from the time of the event.

9. Moab Field Office petroleum engineer, Eric Jones (435-259-2117), shall be contacted for verbal approval prior to commencing remedial cementing, plugging operations on newly drilled boreholes, changes within the drilling plan, changes or variances to the BOPE, deviating from conditions of approval, and conducting other operations not specified within the APD. As a secondary contact: Marie McGann (435-259-2135).

RECEIVED: Sep. 19, 2013

REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

Spud- The spud date will be reported to BLM 24-hours prior to spud. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the Moab Field Office within 24-hours after spud, regardless of whether spud was made with a dry hole digger or big rig.

Daily Drilling Reports- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the Moab Field Office on a weekly basis.

Oil and Gas Operations Reports (OGORs)- Production from this well shall be reported to Minerals Management Service (MMS) on a monthly basis.

Sundry Notices- There will be no deviation from the proposed drilling and/or workover program without prior approval. "Sundry Notices and Reports on Wells" (Form 3160-5) will be filed, with the Moab Field Office, for approval of all changes of plans and subsequent operations in accordance with 43 CFR 3162.3-2. Safe drilling and operating practices must be observed.

Drilling Suspensions- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Moab Field Office. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

Undesirable Events- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the BLM in accordance with requirements of NTL-3A.

Cultural Resources- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Monticello Field Office is to be notified.

First Production- Should the well be successfully completed for production, the Moab Field Office will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five business days following the date on which the well is placed into production.

A first production conference will be scheduled through the Monticello Field Office as soon as the productivity of the well is apparent.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, "Well Completion or Recompletion Report and Log" (Form 3160-4) will be submitted to the Moab Field Office not later than thirty-days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the Moab Field Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval of the Moab Field Office. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered shut-in until the gas can be captured or approval to continue the venting/flaring as uneconomic is granted. In such case, compensation to the lessor shall be required for that portion of the gas that is vented/flared without approval and which is determined to have been avoidably lost.

Produced Water- Produced waste water may be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted to the Moab Field Office for approval pursuant to Onshore Oil and Gas Order No. 7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the Moab Field Office for off-lease measurement, off-lease storage and/or commingling (either down-hole or at the surface).

Plugging and Abandonment- If the well is completed as a dry hole, plugging instructions must be obtained from the Moab Field Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the Moab Field Office within thirty-days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. Final abandonment will be approved when the Monticello Field Office determines that surface reclamation work has successfully restored desirable vegetation.

TABLE 1 NOTIFICATIONS

Notify Jeff Brown (435-587-1525), or Cliff Giffen (435-587-1524) of the BLM, Monticello Field Office for the following:

1 day prior to spud (Brown);

1 day prior to testing BOP (Brown);

1 day prior running casing (Brown);

2 days prior to starting reclamation dirt work (Giffen)

If the person at the above number cannot be reached, notify the Moab Field Office at 435-259-2100. If unsuccessful, contact the person listed below.

Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab Field Office at 435-259-2100. If approval is needed after work hours, you may contact:

Eric Jones, Petroleum Engineer Office: (435) 259-2117
Home: (435) 259-2214

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 09/19/2013

API NO. ASSIGNED: 43-037-30799

WELL NAME: BRADFORD CYN FED 1-23
OPERATOR: D J SIMMONS, INC (N2520)
CONTACT: CHRIS LOPEZ

PHONE NUMBER: 505-326-3753

PROPOSED LOCATION:
NESW 23 370S 240E
SURFACE: 1978 FSL 1645 FWL
BOTTOM: 2500 FNL 2000 FWL
COUNTY: SAN JUAN
LATITUDE: 37.55439 LONGITUDE: -109.25386
UTM SURF EASTINGS: 654236 NORTHINGS: 4157808
FIELD NAME: BRADFORD CYN (310)

INSPECT LOCATN BY: / /		
Tech Review	**Initials**	**Date**
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal
LEASE NUMBER: UTU-12942
SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: DSCR
COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

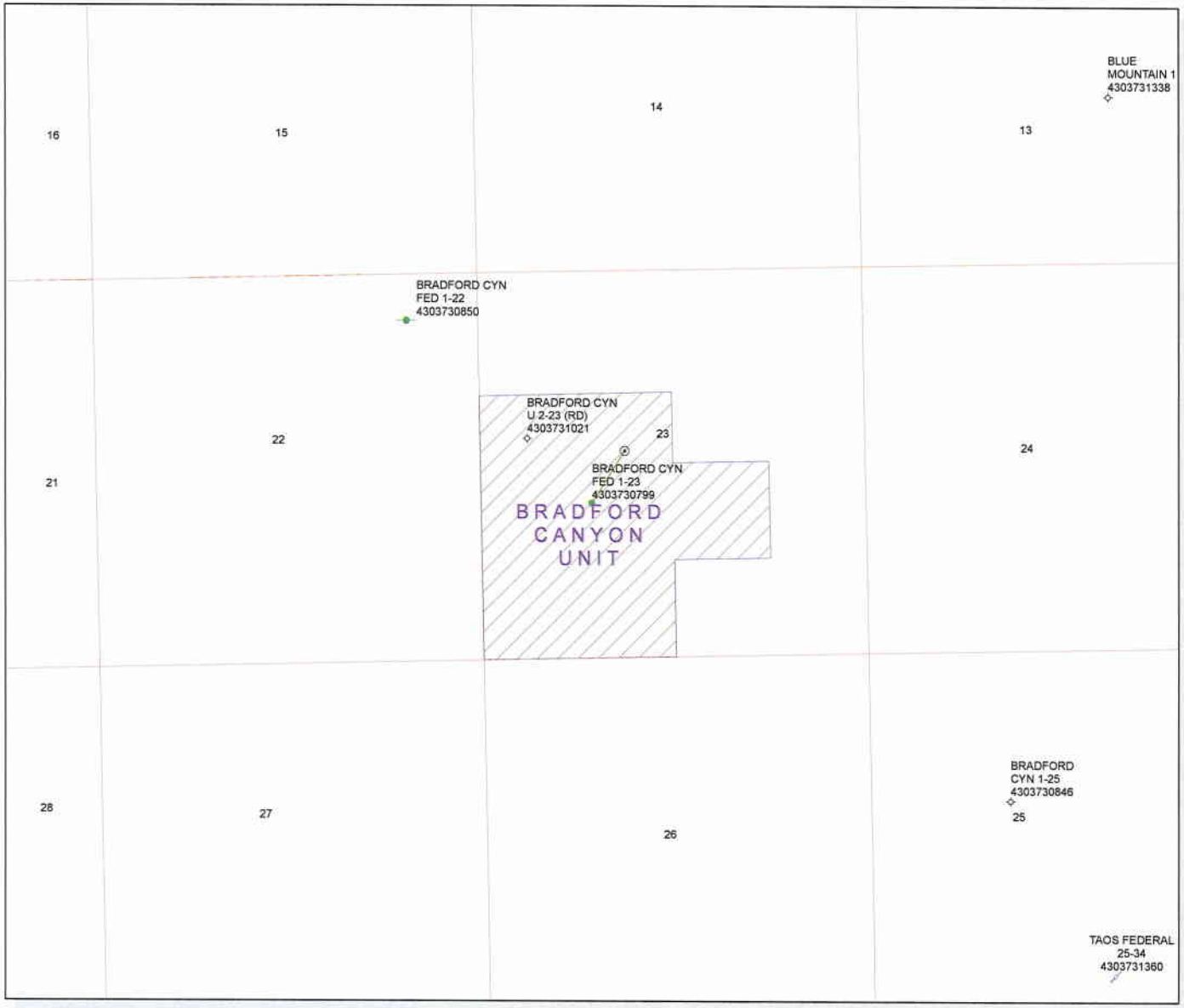
✓ Plat
✓ Bond: Fed[1] Ind[] Sta[] Fee[]
(No. UTB000048)
NA Potash (Y/N)
N Oil Shale 190-5 (B) or 190-3 or 190-13
✓ Water Permit
(No. MUNICIPAL)
N RDCC Review (Y/N)
(Date:)
N/A Fee Surf Agreement (Y/N)
N/A Intent to Commingle (Y/N)

LOCATION AND SITING:

___ R649-2-3.
Unit: BRADFORD CANYON
___ R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells
___ R649-3-3. Exception
___ Drilling Unit
Board Cause No:
Eff Date:
Siting:
✓ R649-3-11. Directional Drill

COMMENTS:

STIPULATIONS: 1- Federal Approval
2- Spacing Stip



API Number: 4303730799

Well Name: BRADFORD CYN FED 1-23

Township: T37.0S Range: R24.0E Section: 23 Meridian: S

Operator: D J SIMMONS, INC

Map Prepared: 9/25/2013
Map Produced by Diana Mason

Wells Query

Status

- APD - Aproved Permit
- DRL - Spuded (Drilling Commenced)
- GIW - Gas Injection
- GS - Gas Storage
- LOC - New Location
- OPS - Operation Suspended
- PA - Plugged Abandoned
- PGW - Producing Gas Well
- POW - Producing Oil Well
- SGW - Shut-in Gas Well
- SOW - Shut-in Oil Well
- TA - Temp. Abandoned
- TW - Test Well
- WDW - Water Disposal
- WIW - Water Injection Well
- WSW - Water Supply Well

Units

STATUS

- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

1,700 850 0 1,700 Feet

1:16,807

GARY R. HERBERT
Governor
SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

October 28, 2013

D J Simmons, Inc
1009 Ridgeway Pl, Ste 200
Farmingon, NM 87401

Subject: Bradford Cyn Fed 1-23 Well, 1978' FSL, 1645' FWL, NE SW, Sec. 23, T. 37 South, R. 24 East, Bottom Location: 2500' FNL, 2000' FWL, Sec. 23, T. 37 South, R. 24 East, San Juan County, Utah

Ladies and Gentlemen:

Pursuant to Utah Code Ann.§40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-2. The expected producing formation or pool is the DESERT CREEK Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-037-30799.

Sincerely,

John Rogers
Associate Director

JR/BGH/js
Enclosures

cc: San Juan County Assessor
Bureau of Land Management, Monticello Office

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR OIL, GAS & MINING

Operator: D J Simmons, In.c

Well Name & Number Bradford Cyn Fed 1-23

API Number: 43-037-30799

Lease: UTU-12942

Location:	NE SW	**Sec.** 23	**T.** 37 South	**R.** 24 East
Bottom Location:		**Sec.** 23	**T.** 37 South	**R.** 24 East

Conditions of Approval

1. General

   Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

   The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

   - Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please let a voicemail message if not available)
     OR
     Submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov

   Notify the Division prior to commencing operations to plug and abandon the well.

   - Contact Dustin Doucet at (801) 538-5281 office
     (801) 733-0983 after office hours

3. Reporting Requirements

   All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited:

   - Entity Action Form (Form 6) – due within 5 days of spudding the well
   - Monthly Status Report (Form 9) – due by 5th day of the following calendar month
   - Requests to Change Plans (Form 9) – due prior to implementation
   - Written Notice of Emergency Changes (Form 9) – due within 5 days
   - Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
   - Report of Water Encountered (Form 7) – due within 30 days after completion
   - Well Completion Report (Form 8) – due within 30 days after completion or plugging

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

6. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-12942

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: BRADFORD CANYON

1. TYPE OF WELL Oil Well

8. WELL NAME and NUMBER: BRADFORD CYN FED 1-23

2. NAME OF OPERATOR: D J SIMMONS, INC

9. API NUMBER: 43037307990000

3. ADDRESS OF OPERATOR: 1009 RIDGEWAY PL, STE 200 , FARMINGTON, NM, 87401

PHONE NUMBER: 505 326-3753 Ext

9. FIELD and POOL or WILDCAT: BRADFORD CYN

4. LOCATION OF WELL
FOOTAGES AT SURFACE:

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 23 Township: 37.0S Range: 24.0E Meridian: S

COUNTY: SAN JUAN

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 1/15/2014	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Please see attached Drilling Summary for the Bradford Canyon 1-23S through 01/04/2014.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
January 15, 2014

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Chris S. Lopez	505 326-3753	Regulatory Secialist
SIGNATURE		**DATE**
N/A		1/15/2014

RECEIVED: Jan. 15, 2014

Bradford Canyon 1-23S
Drilling Summary

Days On:	Date:	Outcome:
1	December 13	FINISH BUILDING RESERVE PIT, N/D TREE, N/U & TEST BOP,TOH W/TBG, RUN BIT AND STRING MILL, TOH, L/D MILL
2	December 16	RUN W/L GAUGE RING T/5500', SET CIBP @ 5390' & 5170', DUMP BAIL 4-SKS CMT ON TOP OF EACH BP, LOAD HOLE F/CBL
3	December 17	RUN & EVALUATE CBL - TOC 4400', TIH W/2.875" TBG, SPOT 9.0 PPG MUD PLUG
4	December 18	TIH, SPOT MUD DOWNHOLE, TOH, RUN GYRO SURVEY, N/D SPEAR CSG, PULL SLIPS, FREEPOINT
5	December 19	N/D BOP, SPEAR CSG, SET SLIPS, N/U BOP, TIH W/TBG T/4510', PUMP CMT PLUG F/4510' T/3950', TOH
6	December 20	PUMP 10-BBLS FRESH WTR DOWN 8.625" CSG T/800 PSI, FREEPOINT CSG, CHEMICAL CUT 5.5" CSG AT 2550' AND 2158'
7	December 21	CIRC 120 BBLS 9.0 PPG MUD DOWN 5.5" CSG & UP 8.625" CSG, WELL STILL FLOWING, SICP: 280 PSI
8	December 23	CONTRACTOR GRAVELING LOC, DRL RIG MIXING 13.3 PPG MUD, WOM, KILL WTR FLOW W/MUD, L/D 53-JTS 5.5" CSG
9	December 24	TIH W/SPEAR, DC'S, JARS, INTENSIFER & 2.875" TBG, JAR ON 5.5" CSG T/75K LBS W/NO MOVEMENT, LEAVE TOP CSG AT 2148', L/D TBG & SPEAR, RIG DOWN
10	December 28	FINISH MR / RU- NU BOP PU TOP DRIVE RU REST OF EQUIPMENT RU SHACKS 2 day rig move due to terrain and narrow road
11	December 29	RU AND RUN BOP TEST/ PU/MU PACKER COLLARS AND HWDP PIPE TIH SET PACKER TEST CASING TO 1000PSI, RELEASE PACKER POOH
12	December 30	FINISH LD PACKER DRILL MOUSE HOLE TIH WITH FISH TOOLS JAR ON CASING NO MOVEMENT POOH PU/MU WASHPIPE TIH
13	December 31	RUN WASHPIPE WASH OVER CASING, POOH TIH WITH SPEAR LATCH ON TO CASING RECOVER 392' OF CASING TIH CIRCULATE AT 2551'
14	January 01	CIRCULATE CLEAN HOLE POOH TIH OPEN ENDED PUMP CEMENT PLUG POOH WOC
15	January 02	WOC, TIH TAG CEMENT, POOH, PU/MU DIRECTIONAL TOOLS, TIH, DRESS OFF CEMENT PLUG, TIME DRILL KICK OFF AT 2300'TVD
16	January 03	TIME DRILL SLIDE DRILL AHEAD AT 3100'MD, 3089'TVD
17	January 04	TIME DRILL SLIDE DRILL AHEAD AT 4103'MD, 3977'TVD

RECEIVED: Jan. 15, 2014

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-12942

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: BRADFORD CANYON

1. TYPE OF WELL Oil Well

8. WELL NAME and NUMBER: BRADFORD CYN FED 1-23

2. NAME OF OPERATOR: D J SIMMONS, INC

9. API NUMBER: 43037307990000

3. ADDRESS OF OPERATOR: 1009 RIDGEWAY PL, STE 200 , FARMINGTON, NM, 87401

PHONE NUMBER: 505 326-3753 Ext

9. FIELD and POOL or WILDCAT: BRADFORD CYN

4. LOCATION OF WELL
FOOTAGES AT SURFACE:

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 23 Township: 37.0S Range: 24.0E Meridian: S

COUNTY: SAN JUAN

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 1/15/2014	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Please see attached Drilling Summary for the Bradford Canyon 1-23S through 01/14/2014.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
January 15, 2014

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Chris S. Lopez	505 326-3753	Regulatory Secialist
SIGNATURE		**DATE**
N/A		1/15/2014

RECEIVED: Jan. 15, 2014

Bradford Canyon 1-23S
Drilling Summary

Days On:	Date:	Outcome:
18	January 05	TIME DRILL SLIDE DRILL AHEAD AT 4965'MD, 4780'TVD
19	January 06	DRILL SLIDE AS NEEDED TO 5010'MD, CIRCULATE AND CONDITION POOH TIH FOR REAMER RUN
20	January 07	POOH FOR WIPER TRIP, REPAIR FUEL LINES TIH CIRCULATE POOH TO PU DST TOOLS TO TEST INTERVAL 4956' TO 5010', TIH
21	January 08	RUN DST TEST OVER 4956'MD TO 5010'MD, POOH PU/MU DIR TOOLS TIH DRILL AND SLIDE TO 5117'MD
22	January 09	DRILL AND SLIDE TO 5305'MD, POOH TO CHANGE OUT MOTOR TIH CIRCULATE DRILL TO 5306'MD, 5122'TVD
23	January 10	DRILL AHEAD TO 5398', CONDITION HOLE, POOH, PU DST TOOLS, TIH
24	January 11	TEST UPPER ISMAY OVER 5298'MD TO 5398'MD, POOH LD DST TOOLS PU DRILLING BHA TIH CIRCULATE DRILL TO 5407'MD
25	January 12	DRILL TO 5480' MD
26	January 13	DRILL AHEAD TO 5486'MD, POOH FOR BIT AND BHA CHANGE TIH DRILL TO 5525'MD
27	January 14	DRILLING AHEAD, CIRCULATE TD WELL AT 5680'

RECEIVED: Jan. 15, 2014

Sundry Number: 46916 API Well Number: 43037307990000

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU-12942

SUNDRY NOTICES AND REPORTS ON WELLS

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:
BRADFORD CANYON

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
BRADFORD CYN FED 1-23

2. NAME OF OPERATOR:
D J SIMMONS, INC

9. API NUMBER:
43037307990000

3. ADDRESS OF OPERATOR:
1009 RIDGEWAY PL, STE 200 , FARMINGTON, NM, 87401

PHONE NUMBER:
505 326-3753 Ext

9. FIELD and POOL or WILDCAT:
BRADFORD CYN

4. LOCATION OF WELL
FOOTAGES AT SURFACE:

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NESW Section: 23 Township: 37.0S Range: 24.0E Meridian: S

COUNTY:
SAN JUAN

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 1/16/2014	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	✓ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

D. J. Simmons, Inc. plans to Plug and Abandon the subject well. Please see attached Plugging and Abandonment Well Bore Sketch for more information.

Accepted by the Utah Division of Oil, Gas and Mining

Date: January 16, 2014

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Chris S. Lopez	505 326-3753	Regulatory Secialist
SIGNATURE		**DATE**
N/A		1/16/2014

RECEIVED: Jan. 16, 2014

DJ SIMMONS, INC.

Bradford Canyon No. 1-23S

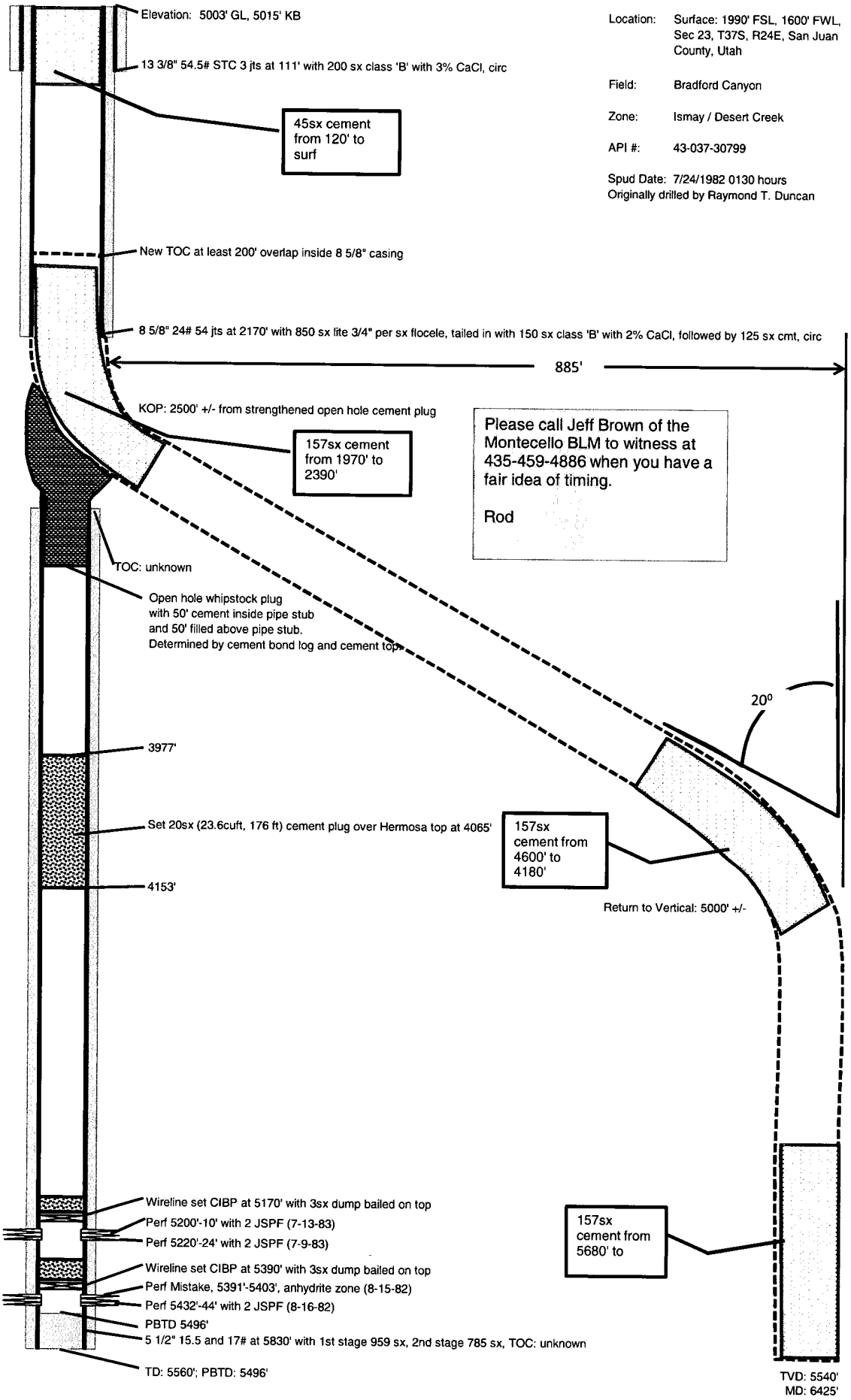
Location: Surface: 1990' FSL, 1600' FWL, Sec 23, T37S, R24E, San Juan County, Utah

Field: Bradford Canyon

Zone: Ismay / Desert Creek

API #: 43-037-30799

Spud Date: 7/24/1982 0130 hours
Originally drilled by Raymond T. Duncan



Not to Scale

December 13, 2013

Rod Seale

RECEIVED: Jan. 16, 2014

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU-12942

SUNDRY NOTICES AND REPORTS ON WELLS

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:
BRADFORD CANYON

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
BRADFORD CYN FED 1-23

2. NAME OF OPERATOR:
D J SIMMONS, INC

9. API NUMBER:
43037307990000

3. ADDRESS OF OPERATOR:
1009 RIDGEWAY PL, STE 200 , FARMINGTON, NM, 87401

PHONE NUMBER:
505 326-3753 Ext

9. FIELD and POOL or WILDCAT:
BRADFORD CYN

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1978 FSL 1645 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NESW Section: 23 Township: 37.0S Range: 24.0E Meridian: S

COUNTY:
SAN JUAN

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT
  Approximate date work will start:
- ✓ SUBSEQUENT REPORT
  Date of Work Completion:
  1/16/2014
- ☐ SPUD REPORT
  Date of Spud:
- ☐ DRILLING REPORT
  Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
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☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

D. J. Simmons, Inc. Plugged and Abandoned the subject well. Please see attached Well Bore Sketch.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
July 16, 2014

NAME (PLEASE PRINT) Chris S. Lopez	**PHONE NUMBER** 505 326-3753	**TITLE** Regulatory Secialist	
SIGNATURE N/A		**DATE** 7/8/2014	

RECEIVED: Jul. 08, 2014

DJ SIMMONS, INC

Bradford Canyon No. 1-23S

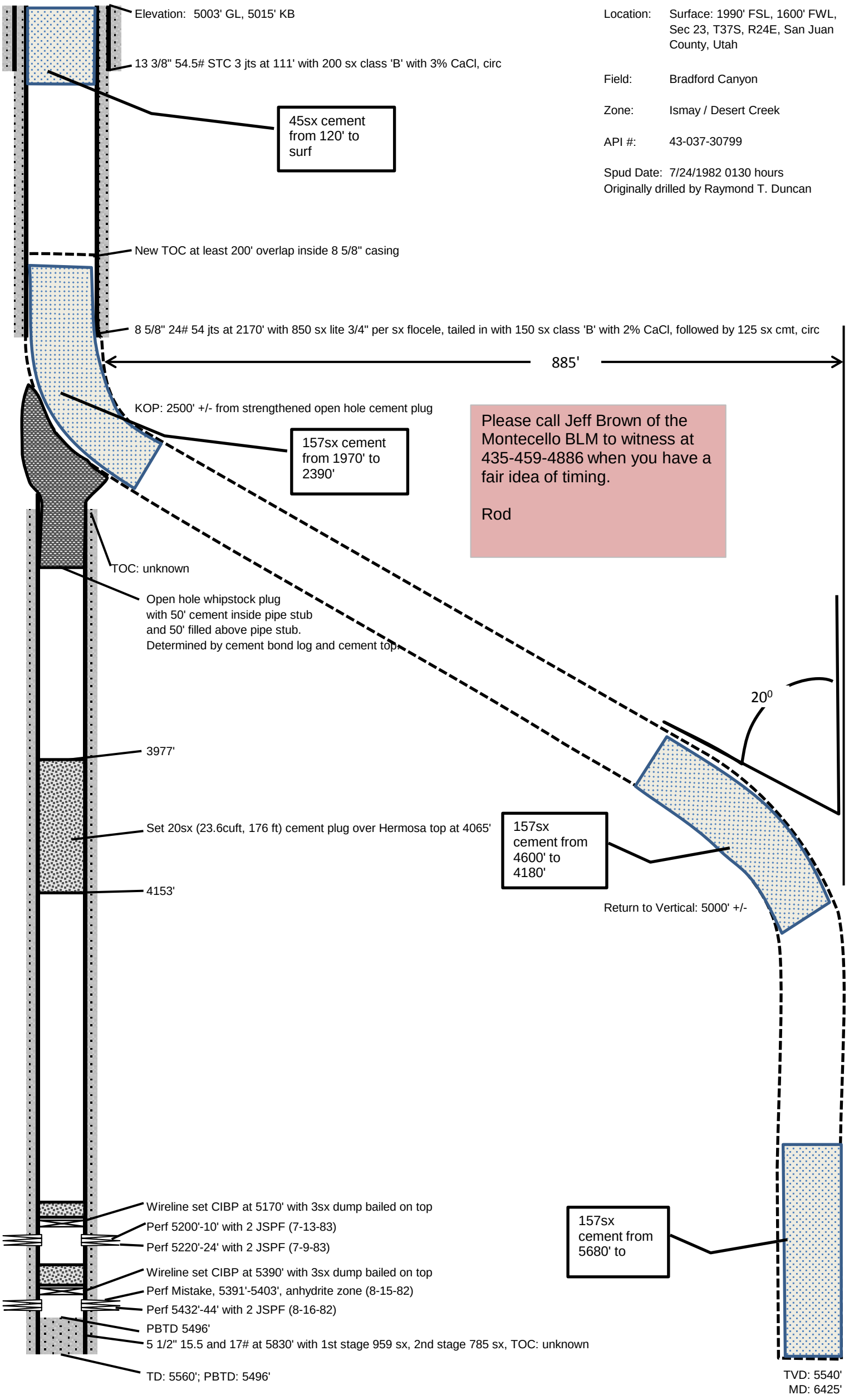
Location: Surface: 1990' FSL, 1600' FWL, Sec 23, T37S, R24E, San Juan County, Utah

Field: Bradford Canyon

Zone: Ismay / Desert Creek

API #: 43-037-30799

Spud Date: 7/24/1982 0130 hours
Originally drilled by Raymond T. Duncan



Not to Scale

December 13, 2013

Rod Seale

RECEIVED: Jul. 08, 2014

Reset Form

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ (highlight changes) FORM 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-12942

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ DRY ☐ OTHER

7. UNIT or CA AGREEMENT NAME: Bradford Canyon

b. TYPE OF WORK: NEW WELL ☐ HORIZ. LATS. ☑ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER

8. WELL NAME and NUMBER: Bradford Canyon 1-23S

2. NAME OF OPERATOR: D. J. Simmons, Inc.

9. API NUMBER: 4303730799

3. ADDRESS OF OPERATOR: 1009 Ridgeway Place CITY Farmington STATE NM ZIP 87401

PHONE NUMBER: (505) 326-3753

10 FIELD AND POOL, OR WILDCAT: Bradford Canyon

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 1978 FSL & 1645 FWL
AT TOP PRODUCING INTERVAL REPORTED BELOW:
AT TOTAL DEPTH: 2500 FNL & 2000 FWL

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 23 37S 24E S

12. COUNTY: San Juan

13. STATE: UTAH

14. DATE SPUDDED: 12/13/2013

15. DATE T.D. REACHED: 1/14/2014

16. DATE COMPLETED: 1/16/2014 ABANDONED ☑ READY TO PRODUCE ☐

17. ELEVATIONS (DF, RKB, RT, GL): 5003 GL

18. TOTAL DEPTH: MD 6,425 TVD 5,540

19. PLUG BACK T.D.: MD TVD

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
High Definition Induction Gamma Ray, Compensated Neutron

23.
WAS WELL CORED? NO ☑ YES ☐ (Submit analysis)
WAS DST RUN? NO ☐ YES ☑ (Submit report)
DIRECTIONAL SURVEY? NO ☐ YES ☑ (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A)				
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

WAS WELL HYDRAULICALLY FRACTURED? YES ☐ NO ☑ IF YES -- DATE FRACTURED:

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

29. ENCLOSED ATTACHMENTS:

☑ ELECTRICAL/MECHANICAL LOGS
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION
☐ GEOLOGIC REPORT
☐ CORE ANALYSIS
☑ DST REPORT
☐ OTHER:
☑ DIRECTIONAL SURVEY

30. WELL STATUS:

Plugged & A

(5/2013)

(CONTINUED ON BACK)

RECEIVED: Jul. 08, 2014

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Chris S. Lopez TITLE Regulatory Specialist

SIGNATURE _____ DATE 7/8/2014

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2013)

RECEIVED: Jul. 08, 2014

DJ SIMMONS, INC

Bradford Canyon No. 1-23S

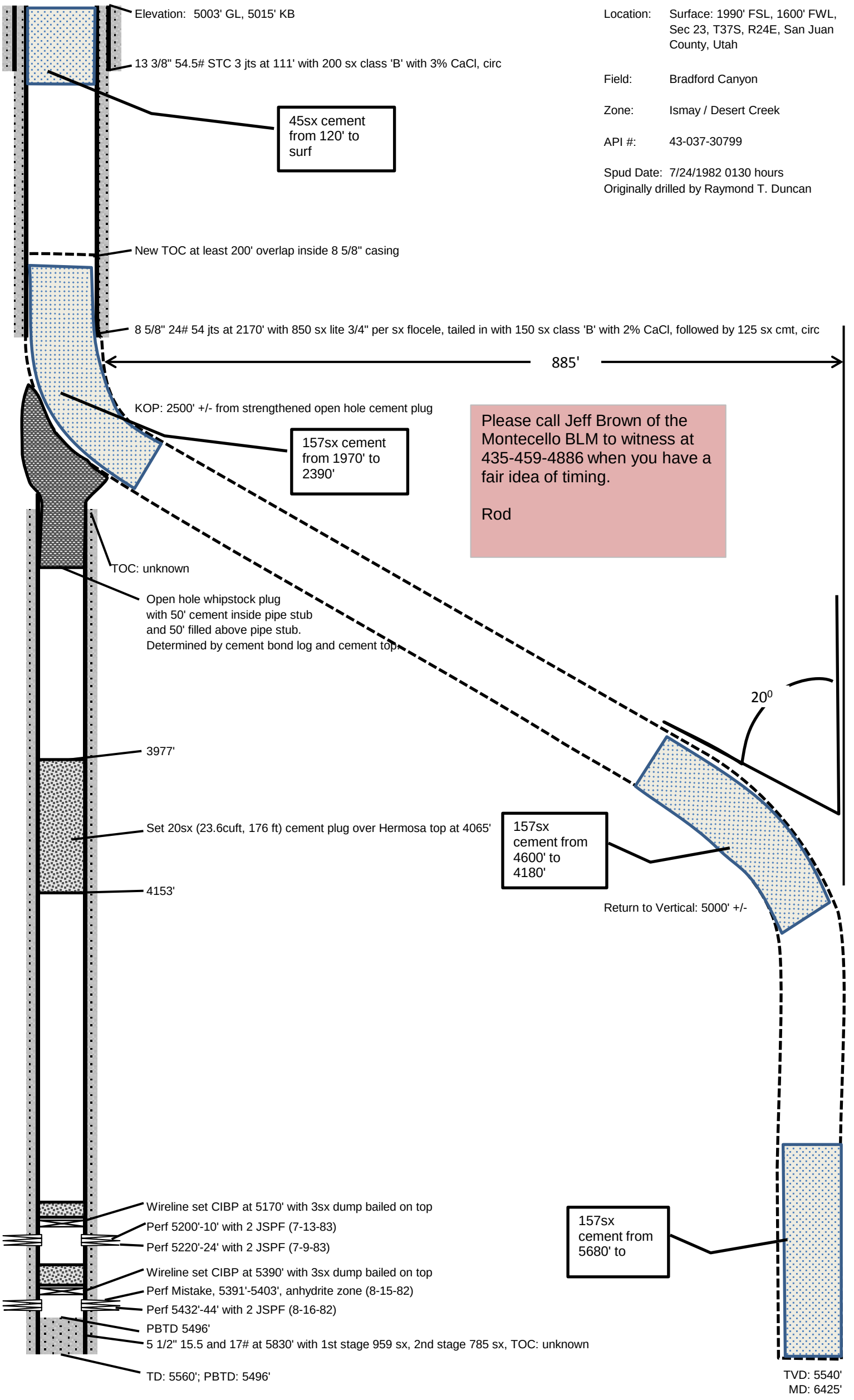
Location: Surface: 1990' FSL, 1600' FWL, Sec 23, T37S, R24E, San Juan County, Utah

Field: Bradford Canyon

Zone: Ismay / Desert Creek

API #: 43-037-30799

Spud Date: 7/24/1982 0130 hours
Originally drilled by Raymond T. Duncan



Not to Scale

December 13, 2013

Rod Seale

RECEIVED: Jul. 08, 2014

Alexis Huefner <alexishuefner@utah.gov>

RE: Sundry For API Well Number 43037307990000 Returned Unprocessed

Chris Lopez <clopez@djsimmons.com> Wed, Jul 16, 2014 at 10:58 AM
To: Alexis Huefner <alexishuefner@utah.gov>

NESW 23 37S 24E

Hey Alexis,

D. J. Simmons, Inc. sidetracked out of the existing Bradford Canyon 1-23 well in an attempt to recomplete the well. During recompletion, it was determined to be a dry hole so the recompletion was abandoned on 1/16/2014 and the well was subsequently Plugged and Abandoned as of that date as well.

Chris

Chris S. Lopez

Regulatory Specialist

DJ Simmons, Inc.

1009 Ridgeway Place

Farmington NM 87401

clopez@djsimmons.com

Phone: (505) 326-3753 Ext 127

Cell: (505) 699-9832

Fax: (505) 327-4659

From: Alexis Huefner [mailto:alexishuefner@utah.gov]
Sent: Wednesday, July 16, 2014 9:55 AM
To: Chris Lopez
Subject: Re: Sundry For API Well Number 43037307990000 Returned Unprocessed

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[Quoted text hidden]
bad content.
